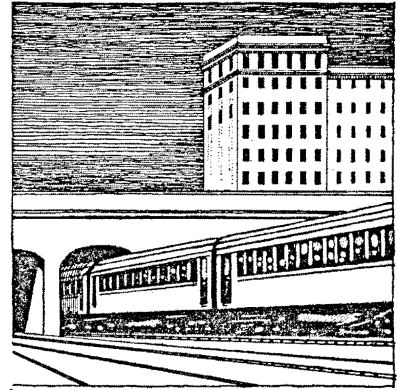
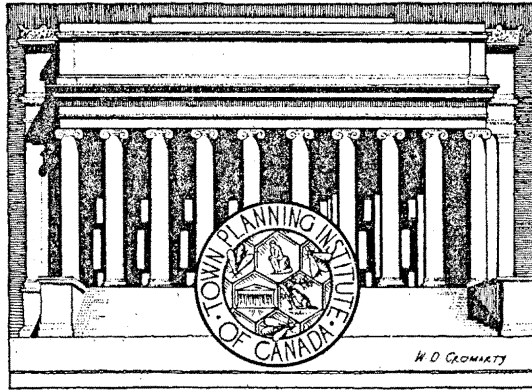


THE JOURNAL



TOWN PLANNING INSTITUTE OF CANADA.

VOL. I

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NO. 10

NEWS AND NOTES

Kapuskasing.

Through the kindness of the Ontario Bureau of Municipal Affairs we are able to present with this issue of *The Journal* a complete report of the plan of Kapuskasing together with eleven maps and plans and a special detail report by Mr. A. V. Hall, associate town planner of the project.

The plan of Kapuskasing, though yet merely a plan, may reasonably be the cause of much gratulation among the town planners of Canada. It is an effort on the part of the Provincial Government of Ontario to lead a movement for the better beginning of town building so that the economic waste of bad planning—needless subdivisions and scattered development followed by multiplication of costs of public services, civic debt and high taxes may be avoided and the creation of squalid areas may be discouraged by the provision of something more intelligent, as well as more efficient, for everybody concerned. The project may also demonstrate to those town planners who are dissatisfied with the present town planning legislation in the province of Ontario how much can really be done with the powers now available.

Still more interesting will be the intimate glimpses given by Mr. Hall of the problems that confront the town planner and his associates in Canada and the means that may be taken to meet the difficulties of those problems. There is seen a group of professional men, town planners, architects, surveyors, engineers, lawyers, willing to co-operate in a great

project with a due sense of social and economic responsibility and willing also to consider the views and requirements of the men on the spot in a spirit of persuasive reasonableness. If squabbles developed the town planning writer seems to be quite sweetly unconscious of them, and to be clever enough to convey the impression that no such calamities were encountered.

Annual Meeting.

The third annual meeting of the Town Planning Institute of Canada was held in the city of Ottawa on May 12th and 13th. Extensive reports of the proceedings will be found in this issue. In the absence of the President, Dr. Deville, Mr. Noulan Cauchon presented the report of Council in which reference was made to definite town planning activity in a number of cities in Canada, chiefly in Ontario but also in cities extending to the confines of the Dominion. At the annual business meeting consideration was given to important amendments to the constitution and to the presentation of a draft charter of incorporation of the Institute. The following resolution was passed unanimously:—

Resolved that the Council be appointed a Committee to:

- (1) Take all necessary steps and incur all necessary expense for the incorporation by Letters Patent of the Town Planning Institute of Canada.
- (2) To see that the by-laws and constitution

as passed and approved by this meeting are incorporated in Letters Patent in so far as the same can be or may be granted by the incorporating power.

- (3) To obtain legal advice and assistance necessary for the purpose.

The view adopted was that incorporation by Letters Patent gives greater freedom and flexibility for modified action under by-laws than by the more rigid act of parliament. The draft and by-laws will be sent out to members as soon as printed with a letter ballot. Members are asked to deal with the matter promptly so that action may be taken.

New Council.

The new Council for the following year was appointed as follows:

President: J. P. Hynes, (Toronto); Vice-presidents: Noulan Cauchon, (Ottawa), James Ewing, (Montreal), W. A. Begg, (Regina); Secretary-treasurer: Douglas H. Nelles, (Ottawa); Librarian: W. D. Cromarty, (Ottawa); Council: H. L. Seymour, (Toronto), Percy E. Nobbs, (Montreal), F. G. Todd, (Montreal), Prof. A. A. Stoughton, (Winnipeg), L. C. Charlesworth, (Edmonton), W. F. Burditt, (St. John, N.B.), F. E. Buck, (Vancouver), H. B. Dunington-Grubb, (Toronto), E. T. B. Gillmore, (Ottawa), A. A. Dion, (Ottawa).

By resolution of the Council it was decided that past presidents and presidents of local branches should be ex-officio members of Council. The following members will, therefore, be members of Council: Thomas Adams, Dr. E. Deville, T. D. le May and C. P. Meredith.

Annual Dinner.

On the evening of Friday, May 12th, the annual dinner was held at the Chateau Laurier. The new president, Mr. J. P. Hynes, was unfortunately unable to be present owing to bereavement in his family and the chair was taken by the first vice-president, Mr. Noulan Cauchon. The Hon. Rodolphe Lemieux, Speaker of the House of Commons, who has manifested an active sympathy with town planning aims, had made a provisional promise to address the members and guests but was unable to be present owing to urgent matters requiring his attention in Parliament. Among the guests were the Mayor of Ottawa and representatives of Government departments who have from time to time contributed valuable service to the work of the Institute.

In the absence of Dr. Deville the annual address was given by Mr. Cauchon, who made special reference to his plan for the proposed Federal District. His Worship Mayor Plant welcomed the visitors

and spoke briefly on the town planning work and prospects of the city of Ottawa. Dr. Adam Shortt (Honorary Member) gave a suggestive address on "One Method of Financing Town Planning." Mr. Thomas Adams spoke on the general economic aspect of town planning. Mr. J. A. Wilson referred to the work of the Dominion Air Service and Mr. H. L. Seymour, at the call of the Chairman, gave an account of town planning prospects in Toronto. Mr. Seymour also extended an invitation to the Institute to hold its next annual meeting in Toronto.

Degree in Town Planning.

Mr. Adams announced that there was a strong movement in Boston to create a post-graduate degree at Harvard university. The idea was that the degree of Master of Town Planning should be given to graduates in landscape architecture who were willing to give two or three years more to the study of town planning. He hoped that Canadian students and practitioners would not be obliged to take their degrees outside the British Empire. For this reason it was important that the educational work of the Institute should proceed. Members of Council had taken some part in presenting the case for a town planning scholarship to the Ontario Minister of Education. It was gratifying to see that something had been done and that a student of the Institute had already been appointed as beneficiary of the endowment.

Dr. Adam Shortt.

It may perhaps be hoped that Dr. Shortt's intensive studies of the relation of town planning to social economy may become a permanent feature of the annual meetings of the Institute and it will be a great service if they should take the form of a book. There is no economic specialist in touch with the movement who can do more to show the deplorable economic waste of bad town building or to convince civic officials and the thinking public that the proposals of town planning are embedded in sober economics and are not mere dreams of town embellishment. In speaking on "One Method of Financing Town Planning" Dr. Shortt referred to his argument of the previous year for civic control of the area beyond the city limits where the mischief of bad development is constantly proceeding, to be paid for out of the city taxes when these areas are added to the city. It is here the "shack towns and slum areas" come into being, as Ottawa and most cities are recognizing, and it is here where the real estate operator, who is often on the councils of the municipalities for the time being gets his Roman holiday and piles up the problems from which he can skip away when his land is sold.

Second Day.

The second session was held on Saturday morning when Mr. Thomas Adams gave an illustrated address on the town planning scheme at Welland, Ontario, for which he is acting as town planning consultant. The illustrations took the form of a series of progress maps showing the various steps necessary in the preparation of a comprehensive scheme of town planning. Mr. W. E. Hobbs, town planning director of the Province of Manitoba, was unable to be present but sent a valuable paper on "The Suburban Problem" which is given in extenso in this issue.

Exhibits.

Among the exhibits was a relief map executed by the Department of the Interior of a portion of the proposed Federal District for Ottawa and Hull suggested by Mr. Cauchon and illustrated in our last issue. It is gratifying to note that this plan has received wide expression of interest from members of parliament of all shades of political thinking and from civic authorities in both cities concerned. The Ottawa Board of Trade requested a supply of 500 copies of the last issue of *The Journal* and these have been distributed among the business men of the two cities. The congestion of business in parliament has not permitted consideration of the problem up to the present but meanwhile the plan is a general topic of discussion and it is hoped that when the pressure of affairs has lightened the Federal District proposal will receive some attention from the Cabinet. It is common knowledge that all the work and expense connected with the plan of 1913 availed little for lack of appointing an executive committee to consider the scheme and bring in recommendations concerning it. Other interesting exhibits were supplied by the Air Board which showed very graphically the intimate relation of aerial survey to the problems of town planning.

Seal.

The seal of the Institute here reproduced has



now become the recognized emblem of the Institute. It is the work of Mr. Henri Hébert, the well-known sculptor of Montreal, and of the first vice-president, Mr. Noulon Cauchon. The design has received the general commendation of

the members. As will be seen the symbolism is interesting and original. Around the margin are the lively bee and ears of wheat, symbolic of activity and national production. Occupying a prominent place is a reproduction of Rodin's statue of "The Thinker". The first Canadian builder, the beaver, is seen at work and the outline of a temple facade is intended to suggest certain extensions and improvements of his idea.

City Planning.

The cities of Welland and London have made definite appropriations for town planning schemes and the work is now under way with Mr. Thomas Adams as town planning consultant. The city of Ottawa appointed a town planning commission last year, with Mr. Noulon Cauchon as chairman and town planning work is in progress under his direction. It should be noted, however, that the city of Ottawa has made no adequate appropriation for the work and the unlimited use of professional services on a voluntary basis cannot be regarded as satisfactory to the town planning fraternity nor should it be to a conscientious council which understands the value of town planning services. Something more reasonable is expected from the city of Ottawa.

Ontario Gives the Homologated Line.

The Ontario Government conceded another item toward a comprehensive Town Planning Act by adding a new section to the Municipal Act which enables cities of 50,000 persons or more to designate a specific set-back street line, with a view to the widening of streets. The act is called "An Act Enabling Deferred Widening of Highways" and besides conferring the power to fix a line for future building also specifies the date—from three to ten years—within which the improvements must be made in order that the city control may be maintained. By this new provision a city of the denomination mentioned may become the virtual owner of the strip of land required for the street but the city need not take possession of it or pay compensation for its appropriation until the time when it is actually required. All compensation is to be paid at the time of entry and on the land value at the time the plan is registered. Compensation is to be paid for buildings on the value at the time of entry but only three-quarters of the proper cost of a one storey building if erected after the plan is registered.

The powers given by this very progressive ordinance have been available in the province of Quebec for many years. The act will make for real progress in the direction of an arterial system of highways and traffic regulation, a problem becoming ever more intricate with the development of automobile traffic.

The time for the execution of these deferred widenings may now be calculated to coincide with their necessity and thus give definiteness to widening projects.

Civic Debts.

The Ottawa Journal remarks:

Quite a number of municipalities in Alberta and Saskatchewan are in financial straits. They cannot pay their debts. Interest falling due on bonds has not been met. In this situation the Provincial Government has come to their help, both with money and advice. They appear to have needed one about as much as the other; for the cause of their temporary bankruptcy has been declared by a competent authority to be "extraordinary expenditures on account of public utilities and municipal enterprises which experience has shown to be unsuited for public operation".

The Ottawa Journal makes a number of dives to find the causes of these troubles but does not bring up much that is of use. A study of Mr. Hobbs' paper in this issue on "The Suburban Problem" and of Dr. Shortt's address on "One Way of Financing Town Planning", may discover something that is worth while. The Manitoba Town Planning Department is concentrating on this problem and has already run against the demand for *laissez-faire* in suburban subdivisions and it is possible that the matter will be settled in the courts. Perhaps it is as well to get a battle fought which has become inevitable if city taxes are to be kept within bounds. As the law stands in Ontario no authority is given to a municipality to prevent subdivisions that are unnecessary and are physically undesirable. The Town Planning Commission is unable to refuse the subdivision of lands, provided that the plans as submitted make adequate provision for such streets and widths as, technically speaking, will fulfil the requirements of traffic circulation and public services. The effect of this is that cities already over-subdivided are unable to check further subdivision. Mr. Hobbs shows the financial consequences to a city of absurd over extension of local improvements to a scattered population. Fortunately the Ontario Government has appointed a committee of members to hear evidence on the need for further protective legislation against *laissez-faire* methods.

Moose Jaw Adopts Town Planning By-laws.

Hon. C. M. Hamilton, Minister of Municipal Affairs, Province of Saskatchewan, has issued an order approving the town planning by-laws of the city of Moose Jaw, which city is the first local authority to adopt a development by-law under the authority of the Town Planning and Rural Development Act.

The approved by-law is accompanied by a map of the city showing the districts into which the municipality is divided for the purpose of regulating the classes of building that may be erected and the uses that may be made of existing premises in the different districts. By this by-law the council assumes the control of new streets and subdivisions, which will be dealt with by the development engineer of the city in accordance with the regulations that have been adopted. Re-subdivisions and the partition of land by description are also subject to approval.

That the administrators of the city have given very serious thought to the future growth and to the guidance of the development along lines that will tend to greater convenience, amenity and economy in the use of land is evidenced by the following list of matters dealt with in the by-law.

- (1) Main thoroughfares;
- (2) Building lines;
- (3) Use districts;
- (4) Width of side yards adjoining dwellings;
- (5) Area of lot on which dwellings may be erected;
- (6) Classification of land;
- (7) Regulation of advertising on buildings and billboards and prohibition of the latter in residential districts and upon any property bordering on a public reserve or park.

The by-law draws upon the ample powers conveyed by the act for enforcing the provisions and the building inspector is required to see that the by-law is being complied with before issuing a building permit for a new erection. To regulate the alteration or conversion of a building to a different use a certificate of occupancy is also required.

During the preparation of the by-law Mr. W. A. Begg, Director of Town Planning, was in communication with the civic authorities and rendered advice. In commenting on the by-law Mr. Begg said: "This by-law is not, of course, as comprehensive as a town planning scheme. It is applicable only within the city limits and does not, in fact, touch on a number of particulars which are mentioned in Schedule A of the act. The city has, however, made a good start in establishing use districts with fixed boundaries and permissible uses that cannot be too easily changed. The safeguards provided for the home areas are excellent and will, without doubt, prove attractive to home seekers."

An important part of the procedure is the advertisement given to the by-law during a period of at least four weeks and the hearing of any objections made to the council in writing. In this case no objections were made to the council that were not removed and no later objections were made to the minister. This is an encouraging indication that

the public will appreciate the efforts of local authorities towards better town planning and will not resent building restrictions that are designed to promote the convenience and welfare of the citizens and to improve the appearance of the city.

Ontario's Scholarship in Town Planning.

The Ontario Department of Education is to be congratulated on founding a scholarship in town planning which is intended to afford post-graduate students an opportunity of studying town planning on the European continent. It is gratifying to note that the first beneficiary of this endowment is Mr. J. B. Helme, a graduate of the architectural department in Toronto University and an Associate Member of the Town Planning Institute of Canada. The award is tenable for one year and provides for travel and study in regional and town planning and housing in the devastated areas of France, where much experiment is being made in the newer methods of town building.

Mr. Helme is a native of Smith Falls, Ont. He entered the university in 1916 but his course was interrupted by two years' service overseas. His initial success in the study of town planning and his extended opportunity for further study may be regarded as the first fruits of town planning education in the University of Toronto.

Town Planning in British Columbia.

In the busy and attractive province of British Columbia, concerned with the real problems of beer, drugs, newcomers and railway matters, town planning has not received much attention in spite of the exhortations of various progressive groups and societies. But at last an ordinance has been passed giving to municipalities zoning privileges and the town of Point Grey, in which the new university is to be built, has taken immediate steps to protect itself from further haphazard development by appointing a commission to put the law into operation.

International Housing Congress.

The International Housing Congress will meet at Rome, September 21-26, 1922. Arrangements are being made to conduct the delegates on a tour of Italian cities of town planning interest. The cost of the tour from London, including all meals except luncheons, will be £38.

Cost of Building Materials.

The wholesale price index of 48 building materials, according to MacLean's Reports, is still 78% above the 1913 standard and has only declined 59% from the peak of May, 1920 — which was 183% higher than the standard of 1913.

CONSIDERATIONS IN THE LAY-OUT OF THE TOWN OF KAPUSKASING.

BY ALFRED V. HALL, B.A.*

Location and Analysis of General Conditions.

The Municipality of Kapuskasing is located at the junction of the Canadian National Transcontinental Railway and the Kapuskasing River, seventy miles west of Cochrane, the junction point of the Temiskaming and Northern Ontario Railway with the Transcontinental Railway. The Kapuskasing River is one of the rivers flowing north from the height of land, emptying into the Mattagami River, thence to James Bay. The town of Cochrane has a population of 2,471 and as a junction point is one of the important centres of Northern Ontario. Thirty miles west of Cochrane is the town of Smooth Rock Falls containing, and depending upon the mill of the Mattagami Pulp and Paper Company, a mill which may reasonably be expected, considering its capacity and timber limits to require ultimately a town of 2,500 people for the operating of the mill. The capacity of the paper plant planned by the Spruce Falls Co., and the size of the timber limits secured by them, will probably require 2,500 people.

The future development of this section of Northern Ontario will be dependent largely upon the policies of the Dominion Government in encouraging, through the National Railways, the growth of industries based on timber manufacture along their lines; and by the Ontario Government in the sale of the timber limits, the development of the latent power for timber manufacture, and upon the sale, settlement, and development of the land, after the timber is cut, for agricultural purposes. Along the Transcontinental for one hundred miles west of Cochrane are small settlements, and the farms of settlers who are largely dependent in the winter upon timber operations, but who are in the summer tilling and clearing their farms.

As the past and present policies of the two Governments are along these lines, it would seem reasonable to think that with the establishment and development of these industries for the manufacture of wood products would come an agricultural development sufficient at least to supply the wants of those engaged in them, and that, while for some time the two developments are interdependent, neither should be commercially controlled or restricted by the other, which seems to be a danger in the case of the closed or company town. Thus in planning the town of Kapuskasing and providing for its future

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growth, provision would seem necessary for more activities than those of the industry immediately responsible for its conception.

Reasons for Planning Town.

The incorporation of the town of Kapuskasing and the planning of the town site were in accordance with the following paragraph, included in schedule A of the agreement between the Government of the Province of Ontario and the Spruce Falls Co. Ltd., providing that after certain timber limits in this region had been sold to the above company with the provision that a paper mill be established in conjunction with these limits:

"And whereas it is essential that housing and other accommodation should be provided in the immediate neighborhood of Kapuskasing, for persons in the employ of the Company in said industry, and others who may become residents there, and the Government is desirous of creating a town and having same planned and developed on model lines, and it has been agreed between the parties that the following lots and parts of lots in the Township of O'Brien, in the District of Temiskaming aforesaid, namely, lots 18, 19 and 20, and those portions of lots 23 and 24 lying north of the Kapuskasing River in the 12th Concession; lots 18, 19, 20, 23 and 24 and that part of lots 21 lying north of the Canadian National Transcontinental Railway in the 13th Concession, and lots 18, 19, 20, 21, 22, 23 and 24 and 25 in the 14th Concession, and lots 18, 19, 20, 21, 22, 23 and 24 in the 15th Concession, or some part thereof will be utilized for the site of the said town".

To provide for the financial requirement, an amount of \$100,000 was set aside to be loaned to the new municipality, guaranteed by the debentures issued, for sewers, water and other public utilities. Similarly an amount of \$400,000 was set aside to be loaned through the channels of the Ontario Housing Branch, a municipal commission of the newly incorporated town, to provide, during the course of a reasonable time, if required, for the erection of at least a hundred houses.

Government Planned.

With this in mind, it was deemed advisable that the Ontario Government should enter into the above agreement and under the direction of its Bureau of Municipal Affairs, J. A. Ellis, Director, organize the municipality, with the assistance of the consulting advice of the officials of the departments already advising municipalities in various phases of town planning. These officials comprise: L. V. Rourke, Director of Surveys, in matters of survey, topography, etc.; F. A. Dallyn, the engineer of the Public Health Department, in matters of drainage and water supply, J. A. Govan, architect, building construction

and regulations, and W. E. Harries and A. V. Hall, town planners for the Housing Branch, in matters of town planning; the Attorney General's Department, in matters of legal and administrative organization, and the Department of Crown Lands in the sale of lots, management and clearing of the lands. Through these channels it seemed possible, without great expense, to direct the layout and physical growth of the town by recording in the preparation of plans, by-laws, and reports for use of the new municipality, the provision for the present and for the future as far as could be foreseen at the time of planning; and as far as economical and legal limitations would seem to permit, at the same time keeping in mind not only the interests of the developing company, but also those of the settlers who have become already established throughout the township of O'Brien. It was clear that in so far as could be foreseen, the provisions and restrictions governing this independent municipality should not be such as to handicap unduly the operations of the company on the one hand, or the settlers or employees of the company, on the other.

The area finally set aside for the municipality consisted of about 2,053 acres, 40% of which had been partially or wholly cleared. Running north and south through the approximate centre of the municipal limits is the Kapuskasing River, and east and west the main line of the Canadian National Transcontinental Railway. The purpose in including within the municipal corporate limits an area so much larger than was obviously required for the town site, was to insure to the municipality control by means of taxation, by-laws, and like restrictions, of the development of land, business, health conditions, for some distance around the townsite itself.

Topographic Plan.

In the agreement of sale of these limits rights were given to the company to develop two power sites. One of these, the smaller, with a capacity of 40,000 H.P. was located on the river, about three miles north of the Transcontinental Railway, and the larger power plant, capable of the development of 125,000 H.P. was situated on the river, ten miles south of the railway. The fall in the Kapuskasing River in the thirteen miles between these two power sites was so slight that the erection of the dam for the more northerly power development raises the level of the river and of all the tributary streams back nearly to the larger development.

With the above facts in view the selection of the town site required the preparation of very careful and accurate data in the way of a topographic plan. Owing to the large area under consideration in the selection of the site for the town, and the difficulties of securing topographic data, a preliminary visit

was made to the site by all of the interested officials of the Government and of the company, to determine the areas which might reasonably be considered, and to study general conditions. As a result of this visit the surveyors were instructed to obtain only the actual information required. Information was in course of preparation by the Department of the Surveys, in connection with the ordinary surveys showing the extent of the lands affected by the power development. On this topographic plan were located all of the buildings that were in any way prominent as well as the levels over the area adjacent to the intersection of the railway and the river.

Considerations in Locating the Site.

After sufficient of this information had been secured the question of the exact location of the town site itself was thoroughly discussed. At the south west quadrant of the intersection of the railway and the river was located the Dominion Government Experimental Farm, which consists of 1,022 acres of agricultural land 166 acres of which were included in the municipal limits. On the south east quadrant were 733 acres 80% of which had been cleared and put into agricultural land by the settlers or by the prisoners at the time when the German internment camp was located there. Upon this quadrant was the site of the large mill, with switches and railway sidings, and along the river bank were the provisions for the handling of its pulp wood. These requirements of the industry made access to and from the railway a difficult problem in locating the town on this site.

At the north west quadrant only 50% of the area had been cut, and the existing station and other temporary places of business were situated, owned and carried on by private individuals. The topographic plan showed that a large portion of this quadrant was too low to be considered for town site purposes.

The north east quadrant containing the largest area of the four consisted of about 75% forest lands upon which the company was making its first cut and the remainder had been cut and only a small amount cleared.

The topographic plan showed that with the development of the northerly power site the raised water level of the river and a ravine stream would surround about 225 acres, forming a peninsula running north from the railway, but that the elevation was sufficient for town site requirements. From the acreage of high area, if this were utilized for lots, and the lower acreage used for park purposes, seven hundred to eight hundred lots could be obtained, a number sufficient to accommodate the population contemplated. While a temporary logging siding from the mill had been constructed at the easterly side of

the area its future removal was deemed possible by the company, if provision were made in the plan for right-of-way, without expense to the company.

An analysis of these three possible areas showed that while the property each side of the river south of the railway was slightly higher in elevation than that at the north, it was already cleared, and that crops were taken from it each year.

In view of these facts, it was felt that for reasons of fire protection—which depends considerably upon large cleared areas being provided—for the future growth and welfare of the town, and inasmuch as it was the purpose of the Government in the sale of the lands in the town site to sell the lots as near actual cost of planning and clearing as possible, that if other considerations were equal, the newly cut area to the north of the tracks should be selected, rather than the land that had been already cleared and adapted to producing supplies for which the new town would furnish a market. It seemed that clearing the area for the new town site would add to the cleared land in the municipality, the cost would not put an undue burden upon the price of lots, and the investment already in the productive land would be turned to good account. After weighing the material advantages and disadvantages of this, as compared with the other sites, tentative selection of it was made, and the town planners were asked to submit sketches showing the possibilities of street layouts upon this site. Several sketches for alternatives were drawn and after a second visit to the site, when the requirements of each were discussed by the officials of the Government and of the company, one was decided upon as most suitable in general outline. It was found that to secure circulation through the town that a bridge across the river at a different location from the two small ones existing was necessitated. The company in their original agreement had agreed to raise, at considerable expense, the present bridges and replace, by means of a large fill, the Government highway which would be required by the development of the northerly power site, and the resulting raised water level. As the proposed bridge was found to require only a slightly increased cost they agreed, in lieu of the former obligation, to undertake that of supplying the required new bridge. With this assurance and on the basis of this layout the engineer for the Department of Public Health was instructed to go into the matter of drainage and water supply, in a preliminary way, and with the data contained in the topographic plan, make a report upon the drainage and water problems involved in this site, first in regard to its general practicability, and second as to the cost. As the engineer's report, based on the tentative arrangement of streets, was favourable, the site was finally adopted.

Plan of Streets and Subdivision.

The preliminary work required in the selection of the site now being finished, the town planners were instructed to prepare a plan showing the location and width of streets required by the whole municipality, and the division into lots of the land within the areas selected as site for the town. This plan was to be drawn in accordance with the provisions of the Planning and Development Act (Chap. 38 O. S. 1918) and staked and certified to by an Ontario land surveyor for approval by the Railway and Municipal Board, as a plan of subdivision, under the meaning of the act.

The preparation of the plan of subdivision entailed thorough consideration of the needs of the future town from the physical, industrial and economic stand point, and had at the same time to attempt to forecast as nearly as possible natural lines on which the immediate growth should develop. The cost of staking the lots, and of the following municipal improvements suggested that rectilinear and straight street lines be used in preference to curves, wherever practicable.

Particular attention was given to the preliminary report of the sanitary engineer, and his criticisms were secured in order that in so far as possible the frontages should be arranged in the subdivision plan in such a manner that what would appear to be the most valuable lots should be fronted on the streets requiring the heaviest initial expenditure for local improvements especially in case of the sewerage system, the first unit of which had to be designed of sufficient capacity to care for extension along the streets not immediately to be improved.

In the consideration of the plan of subdivision it seemed best to allow Riverside drive a lot frontage on one side only, to follow generally the water's edge in order that the view of the rears of lots and buildings would not be the one seen in the approach to the town, even although a street of this nature from an economical point of view presents serious difficulties in the cost of local improvements. To offset this, however, the desirability on account of view of the lots along such a street and the future assessment values, combined with the reasons mentioned above, seemed to warrant this treatment.

The size of the residential lot which was adopted was to be approximately from 6,000 to 8,000 square feet, and in the case of lots set aside for business or industrial purposes, these areas could be made less. Fifty feet was the standard frontage width but was varied where necessary. The depth of the residential lot was to be approximately 150 feet, while 100 feet was considered sufficient in the business and industrial sections. In the residential area, no provision was made for lanes, particularly on account

of the generous width of the lots, and the restriction which is described later, allowing only one house to the lot.

Main Business Centre.

The main arterial highways are without question the Government roads with highway allowance of 66' in width made in the original township subdivision on each side and adjacent to the railway right-of-way. As the river formed a barrier to these without expensive bridging, a matter that could only be handled in the distant future, and as that to the south was cut by the sidings to the mill, provision for connecting these and carrying them through the town and across the new bridge was required. Riverside drive with a width of 88' fulfilled this requirement and naturally was a factor in suggesting the location near the northerly bridge head of the main business centre of the town.

Another factor in the location of this centre was the relative convenience of access to this area from the station and railway on the one hand, and from the residential areas on the other. A third was the possibility of developing a dignified entrance in approaching the town from the station, the chief entrance for some time to come.

At the north end of the bridge, Empire avenue, from the intersection of Riverside drive, was given a width of 100', to its intersection with Bowman ave., on the west, and Mundy ave., on the east, where a triangular area was left as site for the Government or municipal buildings. It continues 88' in width to the highest point on the site where it is terminated by the site for the school. Connection to the north seemed best to be made by the extension of Mundy ave. by a bridge across the narrowest point in the ravine. Drury and King streets make the required circumferential streets demanded by the arrangement.

With the hope that this business area would be developed in a permanent way, and anticipating certain restrictions to this end, it was obviously wise that the requirements for business purposes should extend further than the lots which could be reasonably considered as immediately necessary for such development, therefore lanes providing service to all lots enclosed by King street were extended to provide for change if the business area required expansion, and forced the rebuilding of the surrounding area, which at first would probably be used for residential purposes.

Secondary Business Area.

With the above in view regarding a business centre of a permanent type, it was obviously necessary to provide another business district upon which

could be erected business buildings of the type immediately required by the new town. This type has been shown by experience often to be very temporary, and the buildings of cheap construction. Provision was made at the circular intersection of Cane and McPherson avenues for this secondary business centre, and access to the areas of these lots was given by the provision of lanes.

Restrictions will be made in the sale of the lots in this area to prevent the erection of buildings other than those used for business purposes.

Location of Cemetery.

In providing for the requirements of the town careful thought had to be given to the proper location of a site for the cemetery. The first requirement was that it should be located where natural and easy drainage is possible, and second that it should be easily accessible at all seasons of the year. A site meeting these requirements was found within the municipal limits, not too far from the town site. The area available is sufficient to provide for the two cemeteries required, and their expansion.

Comparative Areas.

The areas shown by the plan of subdivision, including reservations made later for churches, hospital, etc. are as follows:

| | |
|---|---------------------|
| Streets and alleys, comprise... | 74.5 acres or 33.7% |
| Schools, churches and public buildings comprise | 9.2 " " 4.3% |
| Parks and recreational areas comprise | 26.6 " " 12.0% |
| Lots comprise | 110.5 " " 50.0% |

and the total area in the town

site comprises 220.8 acres.

Consideration was given to the public buildings of major importance, such as municipal buildings and schools. As other public and semi-public buildings such as churches, hospitals, etc., required more lengthy consideration by all parties concerned, the plan of subdivision did not distinctly provide for these, the idea being that certain groups of lots would be dedicated to provide for them.

General Street Plan.

With the streets of the town site thus established, a study was then made for the future extension and linking up of these streets with those which either were at present, or would later be opened up inside and beyond the municipal limits. The Government highways from the east along the transcontinental line formed another diagonal to the south. It was therefore necessary to suggest only a few additional diagonal streets connecting with the streets along the lot lines, to complete a street plan for the whole

municipality. These streets, provided as they are along and intersecting with definite points in the lot survey of the township, made easy the certification required for a town plan within any meaning of the Planning and Development Act, for the approval of the Railway and Municipal Board. These streets need not necessarily be opened nor need they affect the use of land for farming purposes, until such time as they are either required for general purposes, or it is desired by the owner to subdivide his property for the sale of lots. If the land is subdivided they must then be dedicated for streets before approval of the plan is given and registration is permitted. Sales of property by the Crown will, however, be subject to this plan and will by agreement insure the reservation for street purposes of either the absolute streets laid down or provision for streets which are in the opinion of the Railway and Municipal Board in general conformance with them, even if the sales be made by metes and bounds.

Detailed Plans.

After the street and subdivision plans were delivered to the surveyors for staking, and after the minor changes and adjustments to the original layout had been provided for during the process of staking, consideration by all parties concerned was given to the preparation of detailed plans.

The purpose of these detailed plans is to put on record for the benefit of the present and future councils the suggestions with regard to detail which were considered in planning the town, and to explain clearly the underlying reasons why the provisions of the general plan were made. This information in such a problem is largely for guidance and should be adhered to only so far as changed conditions seem to permit at the time when these points actually arise for definite consideration.

Sewer and Water Plans.

The first of these in the order of their importance was the plans for the sewer and water systems and the proposed width of the roadway upon which these were to be installed. As the governing gradients for the sanitary drainage seemed from the topography to be very slight, and the depth of the soil above the rock formation appeared to vary, the engineer had tests made along the lines of the streets to satisfy himself exactly as to what the conditions were.

As the amount set aside by the Government as a loan to the municipality for the purpose of local improvements was moderate—a sum of \$100,000—and as this sum was to include not only the installation of the first sections of the sewer and water systems, but was to finance any other local improvements such as sidewalks or road surfacing the design

of the outfall sewer and the disposal works required on the one hand to be of sufficient capacity to care for future extensions, and on the other to provide that the location of the larger mains should, if at all possible, be placed along streets where the first local improvement charges made by the municipality would immediately begin to repay their installation.

While these factors had in a general way been discussed and had in conference governed the plan of subdivision, the additional information mentioned above made certain changes desirable and showed that by careful arrangement the drainage of the town site could be secured entirely by gravity. The outlet for the sewerage system had necessarily to be the river, and the fact that possibly the development of the northerly power site might not take place immediately necessitated a temporary arrangement whereby the sewage could be discharged through a filtration plant to the stream. Later, when the level of the river would be raised it would have to be pumped and gravitated through a disposal works.

The location of the water system did not present its usual difficulties as arrangements were made in the agreement that the pumping unit of the company should supply the water and light to the municipality at cost.

Matters concerning fire protection had, however, to be determined upon and hydrants and circuits for this purpose properly located.

While the plans for the public utilities were being prepared detailed study was given to the possibilities of the development of park land, the location and treatment of station grounds, treatment of paved width for streets, both for those of primary and secondary importance, and for the location of the first houses to be erected in the town.

Park Areas.

As the town site would be surrounded on three sides by water after the power was completed; as certain portions adjacent to the river were somewhat low for building purposes, and in order to control and secure the use of this water front for the town, the lots were not allowed to go to the water's edge, but this surrounding area was set aside for park and recreational purposes, with the exception of a comparatively small area which would probably be required for industrial purposes such as lumber yards, etc. This park area comprised one ninth of the area above the raised level of the river, and to the north west gave a space of sufficient area for baseball and football games, etc., while at other points it allowed little more than a walk.

Public Buildings.

The location of the sites for all public and semi-

public buildings was decided upon at various conferences and after deputations by the parties concerned with the officials of the Government. Two public school sites had been set aside tentatively in the plan of subdivision, but no definite allocation had been made for churches, the separate school, hospital, or recreational areas such as might be required for games or sports at which a fee is charged.

Two prominent block corners, one at King and Mundy streets, and the other at King and Bowman streets flanking the reservations for the school site were decided upon as logical locations for the two churches for which it was the purpose of the Government to provide free sites. It was the wish of the Catholic denomination that the site for the separate school should be, if possible, adjacent to that of the church, which request was considered favourably by all the officials, and as the block of lots including the easterly church site was best adapted to this the required allocation was made. The allotment was made for the hospital site on the high ground adjoining the park lands at the north east section of the town site. This site seemed to the consulting architect to meet best the requirements of quiet, accessibility, and elevation.

A recreational area was selected along McPherson avenue and Riverside drive for use of sports and the buildings therefor which might require charges for admission, as such cannot be erected or carried on in the public parks.

Housing Provisions.

In the agreement between the Government and the company, provision was made that the Government advance to the Municipal Housing Commission in accordance with the Housing Act of 1920, \$400,000 for the purpose of building houses for residents of the municipality and company on the lands within the municipality. In addition to this, it was the desire of the company to move many of the houses previously erected on the land owned by them, and acquired by them in the purchases of land, to lots within the town site. It was decided that the houses to be moved in and the first houses to be erected by the Housing Commission should be located in so far as practicable in a comparatively compact area for purposes of economy in expenditure for local improvements, and near the secondary business centre. Twenty-five sites were selected as those upon which the first houses erected by the Housing Commission should be placed.

Preservation of Lots for Housing Commission.

The appropriation for the purposes of the Housing Commission provides roughly in its amount for the erection and purchase of approximately one hundred houses and lots. As this provision was made

to cover a period of years, it was necessary to insure by reservation that the Commission should always have sufficient lots available for this purpose at the original purchase figure. Reservations were therefore made, the greater portion of these being in the area where it is desirable that building take place earliest from the point of view of extension of local improvements. The reservations for the Housing Commission need not be unchangeable, so long as the required number of lots is at their disposal.

Industrial Areas.

The consideration of the requirements of an industrial area in the town site was governed by the fact that the mill industry was, with the exception of its spur to the northern power site, entirely south of the railway, and by the fact that the railway also had to the west of the river by its station a strip 200' wide, south of the railway, for main siding and team track purposes, which would serve all requirements for some time to come. This railway area seemed too small for all future requirements and the control of the land adjacent to it was not in the Crown, and so was not available for its expansion. Warehouse, lumber yard and foundry industries might reasonably be expected to require space, and while it was felt that the exact area and requirements of a commercial or industrial district was on this account extremely vague, sufficient area adjacent to the railway was planned for this purpose and provided with lanes and access to the water. As the question to what extent sidings, etc., would be required was also vague, provision was made for a strip of unsubdivided land adjacent to the railway tracks which could be later used as required.

The present site of the railway station would, by the agreement providing for the erection of the new bridge in lieu of raising the level of the Government Road on the north side of the railway, close for traffic the Government Highway between its site and the new bridge leading to the town. Owing to this difficulty the suggestion was made that the site for the station be moved east toward the river and be located on the south side of the tracks. Provision was made in the plan that if this re-location were made ample area be dedicated for the purpose of well developed grounds about the station.

At the suggestion of Mr. C. B. Brown, the engineer in charge of this district for the Canadian National Railway, streets crossing the railways were reduced to the minimum number and where these crossings must of necessity be made, sufficient width and directness of approach to the crossing was provided to permit of grade separation if this should ever be required. Suggestions were also received as

to the best method of providing switch accommodations both for the present and future requirements of the industrial districts.

Zoning.

After the foregoing consideration had been given and provision made for arrangements of streets, defined areas, etc., based upon a well considered, reasonable, and economical programme of probable growth, it was evident that if actual growth followed this programme in any degree and thus avoided a haphazard development, restrictions must be made to provide that the orderly way be the easiest one. Such restrictions were particularly required to protect by a sound municipal development the expenditure of funds advanced by the Government, and guaranteed by the company, and because it was felt that encouragement and protection should be given to the individual who might wish to erect a permanent type of building which would be more easily possible if the character and use of his immediate vicinity were clearly defined.

The ways of imposing such restrictions were by the provision of certain existing legislation embodied in the Municipal Act, through building and districting by-laws, and by the vendor in restricting through the medium of the sale agreement.

The sale of the lots was to be made through the ordinary channels covering the sale of public lands, and the first step was to place a comparative value upon all of the lots. These values were based upon past experience in such sale, and were in accordance with the agreement between the Government and the company to provide that the sale of lots should only cover the cost of laying out the town and clearing the town site. These values naturally placed at a higher figure such lots as by the layout of the town and desirability from the standpoint of use seemed to justify this, while others having relative disadvantages were placed at less value.

The consulting architect drafted building by-laws suggested for adoption by the council in which clear definition was given to different types of construction, to meet the needs of health and safety, which it is the purpose of such by-laws to provide. The drafting of these by-laws was a compilation made from the study of many existing by-laws adopted by large and small municipalities in England, the United States and Canada, and particular effort was given to make them as simple as possible, eliminating from their provisions those which were applicable only to the large municipalities, and in general providing that the building by-laws did not consist of only hard and fast rules and descriptions, but of information upon which the local council could, through its officials, base their decisions.

With the descriptions of types of buildings set forth in the building by-laws, certain groups of lots were decided upon which, in their sale, would be restricted, first, to be used for the erection of retail business buildings of certain types of construction; second, for industrial buildings, and third, for boarding houses. It was also decided that not more than three lots in the town site could be sold to one applicant and that unless full purchase be made within a reasonable time the lots should revert to the Crown. The purchase of this was obviously to prevent a scattered development due to land speculation.

In addition to the above restrictions regarding the use of all areas other than those to be used for residential purposes, a plan was prepared under the provisions set forth in section 399A of the Municipal Act, by which certain areas in the municipality can be definitely set aside with the approval of the Railway and Municipal Board for the erection of detached houses only. Under this provision the whole area of the municipality aside from that restricted by the sales agreement for other purposes, was placed under this restriction. Further provision was made that the type of residence in the building by-laws covering the construction of solid brick, or brick veneered residences should be applied to a small number of the most desirable lots.

A wide application of the power of restricting land to residential purposes only was used in this instance to insure that industrial and commercial pursuits should, if they locate within the municipal limits, take their place along the lines of local improvements installed for general convenience and health. Residences within the meaning of the above shall include in their classification, farm houses and buildings such as may be necessary for agricultural purposes; this was because the sale of the township lots or parts thereof, included in the municipal limits but not redivided by the town site, would naturally be sold for agricultural purposes, with the necessary provision for the reservation of projected street dedications. In fact additional encouragement should be given to such purchasers to clear their land as quickly as possible for the fire protection of the mill and the town.

In Conclusion.

The town of Kapuskasing has therefore received probably a greater amount of constructive thought in its organization and layout than that of many new municipalities in Ontario. This thought was given by men daily advising under Ontario laws upon the problems similar to those encountered here.

In view of the awakening interest and demand for more foresight in the development of Ontario municipalities, both new and old, it will be interesting to note to what degree this thorough planning

of a new municipality will enable it to avoid the mistakes of those not so thoughtfully established, and how nearly the officials giving this advice have been able to forecast both its future requirements, and the commercial and political conditions on which their provisions were based. It will also be evident from the foregoing that many restrictions have been provided which are based entirely upon the fact that the land of the town site was owned by the Crown, and that restrictions through the medium of sales agreements can be made to attain in a degree the end in respect to use and regulation which could not at present be secured in the older municipalities.

Aside from the matter of planning the town itself, one of the most notable things which will be brought down in this connection will probably be the suggested building by-laws mentioned above. These have received a great amount of care and thought in comparing the suggested provisions with provisions of similar small municipalities all over the continent. The information and suggestions made by this codification should be of immediate assistance to any existing municipality and it is to this end that the Bureau of Municipal Affairs propose to publish them at a later date.

Whatever success the plans of Kapuskasing may prove to have will be directly due to the co-operation of the various consulting officials who have, in addition to their regular and sometimes exacting duties, given so largely and harmoniously of their best thought and, to a great degree, their personal time in the consideration entailed by this work. Happily the consultants have had to deal with a company the heads of which have never failed to take a broad-minded attitude, and have at many times conceded points which must have seemed almost vital to their own safety when it has been thought by the consultants that such concessions were necessary for the success of the town. This is particularly to be commended when the whole project along the lines proposed must have seemed to them largely experimental.

ANNUAL MEETINGS

REPORT OF COUNCIL.

General Progress.

Town planning in Canada during the past year has made appreciable progress though the public and official understanding of its economic and social importance still leaves much to be desired. It will be necessary for some time to come to pursue the public mind steadily and incessantly with the message that town planning insures national health, economic

efficiency and those elements of decent existence which should be possible to all men—light, air, room to live and some contact with beauty in home environment without which human faculties will not function. It is the belief of town planners that the law of the social organism can and should make these elementary necessities available for all and that the selfishness and ignorance that make them impossible to millions of city dwellers should be resisted. The planning of Kapuskasing by the Ontario Bureau of Municipal Affairs is one of the most hopeful signs of the year. It means the movement of massed power in the direction of town planning, a power which can do things by a stroke of the pen when the work of individuals, however ardent and persistent, is of little avail against the inertia of obsolete law. The restrictions which insure to the municipality control of the "development of land, business and health conditions around the town itself" are a great advance in social legislation. The street mesh appears to be efficient and pleasant, the lots of adequate size and zoning is provided.

As an example of the endeavour to attain Garden City status we quote the following from the report:

It is also being considered whether not more than three lots in the townsite can be sold to one applicant and unless such lots be built on whether within a reasonable time they should not revert to the Crown. The purpose of this is to prevent speculation.

The report contains the interesting announcement that a set of modern building by-laws is being prepared for the use of the municipalities of Ontario. There is no more patent need, since the building by-laws of most towns and cities are half a century out of date. The first city that makes a set of simple and intelligible modern building by-laws, properly indexed, will wake up to find itself famous.

Through the kindness of the Ontario Bureau of Municipal Affairs we are able to send a copy of this most interesting report with accompanying maps to every member of the Institute with the next issue of our *Journal*.

It is also gratifying to note that the cities of Welland and London, Ontario, are definitely committed to town planning schemes and that the necessary appropriations have been made, officials appointed and the work begun. By arrangement with the Geodetic Survey and the collaboration of the Air Board the city of London has received the valuable assistance of aerial surveys and in this matter may be said to be a pioneer in Canadian town planning. It is earnestly hoped that the Dominion Government will give every opportunity to the Air Board to extend its operations in this direction. It is being freely acknowledged in the United States and in

England that the Canadian Aerial service for peace purposes is the most progressive in existence. The cities of Niagara Falls and Kitchener, Ontario, and the Border Cities are also contemplating town planning projects. The Ottawa Town Planning Commission has been in existence for a year and substantial progress has been made toward a comprehensive scheme. Ten reports to Council have been made by the Commission and a number of the recommendations have been carried out and others are in process of accomplishment.

Another advance to be recorded is the appointment of a Town Planning Comptroller for Manitoba. Apparently the only compulsory clause in the Manitoba Act is one requiring the approval of subdivision plans before these are registered. This, however, gives a very beneficial control out of which further advance will come. Several applications have already been made to the department for authority to prepare schemes containing zoning restrictions. A set of procedure regulations has been issued which will probably shake down into smooth working with experience in actual progress.

Town planning is advancing steadily in Saskatchewan which has the most advanced town planning act in the world. It has the distinction of first putting an obligatory town planning act into operation.

Alberta has a town planning act on its statute books, but so far as we know there are no signs of activity, and no executive appointed.

British Columbia is giving evidence of awakening. The municipality of Point Grey, in which the new University of British Columbia is situated, has passed a zoning ordinance in accordance with the new powers granted by the legislature which is likely to lead the way to active town planning development.

Quebec is still without adequate legislation but we hope it will eventually find adjustment enabling it to plan and control its land and housing development.

In Montreal the town planning advocates are on the alert to further the cause and are constantly endeavouring, with some degree of hope and encouragement, to get the civic authorities to undertake the planning of Montreal. The Town Planning Conference held in Montreal the latter part of September 1921, which was attended by prominent engineers, social workers, interested citizens and political representatives, started a movement which is gaining momentum and should eventually bring about the most beneficial results to the city.

Nova Scotia has had a compulsory act since 1915 and considerable town planning activity has been shown in connection with the devastated area at Hali-

fax and the general town planning scheme for that city.

In New Brunswick the city of St. John has a scheme covering twenty thousand acres nearly completed.

Local Branches.

The two local branches in Toronto and Ottawa have kept up their activities and proved stimulating centres of town planning thought and propaganda. On the Toronto branch has fallen the burden of watching Ontario legislation and urging the provincial government to pass a town planning act for Ontario that will include and codify the many valuable powers now scattered throughout the municipal and various other acts. The Toronto branch is working in unison with the Ontario Town Planning and Housing Association of which Mr. J. P. Hynes is president.

Professor Frank Buck, of the University of B.C. has been endeavouring to get a local branch established in Vancouver. Mr. James Ewing is working to the same object in Montreal where the fruits of the Montreal conference may be concentrated in more direct and effective action. The Institute looks hopefully towards the success of these endeavours.

Membership.

Membership has been increased this year by 10 full members and 14 applications approved awaiting theses. There is a total membership numbering 152.

The thanks of the Institute are due to the Board of Examiners for their valuable services in dealing with the theses.

The Universities.

McGill University in its social service course has drawn attention to phases of town planning and housing and members of the Institute have given lectures on the subject.

Toronto University in January last held a short course in Civics and Town Planning at which members of the Institute gave a number of lectures on architecture, engineering and civic development.

The Toronto University Extension course referred to is the first regular town planning teaching undertaken by any university in Canada and augurs well for the future development of Ontario in the training of men to carry on the work. The authorities of Toronto University deserve the highest commendation for their foresight and initiative in fostering this new branch of learning. It is recognized that the President, Sir Robert Falconer, who was one of the first honorary members of the Institute, may be depended upon to give town planning education a real chance to justify itself on the University curriculum.

The Journal of the Institute.

The Journal is now in its second year of existence and is doing inestimable service in creating and sustaining town planning interest throughout the Dominion. Numbers 4-5, 6, 7, 8 and 9 contained five interesting double page coloured supplements, illustrative of two garden city lay-outs, one garden village, one city plan and one Federal District plan. The opportunity to present the illustrations and the excellence of their reproductions are due to the collaboration of our President, Dr. E. Deville, and the sympathetic co-operation of the Dominion Department of the Interior in our educational efforts.

We wish to express also our appreciation of the untiring and successful efforts of our editor, Mr. Alfred Buckley, to whose care and energy the maintenance of our *Journal* at its present high standard is due. We now have a gratifying number of regular subscribers outside of our membership and demands for *The Journal* are coming from many parts of the world.

The Constitution.

The Council reported at the last annual meeting the unforeseen difficulties that beset our path in making changes in our original constitution as these became necessary. The proper steps having been taken according to the old constitution it is now in order for the annual meeting to discuss the vote upon the revised constitution and by-laws, having in view the incorporation of the Institute.

Two courses are open to the Institute:—

1. An Act of Parliament.
2. Letters Patent.

Legal advice seems to favour the latter as allowing us more flexibility in the management of our affairs. The latter is also less costly and more expeditious.

REPORT OF THE HON. SEC. TREASURER.

MAJOR D. H. NELLES.

During the current year the membership of the Institute has been increasing steadily, and at present stands as follows:

| | |
|-----------------------------------|-----|
| Members | 41 |
| Associate Members | 73 |
| Legal Associate Members | 2 |
| Associates | 11 |
| Student Members | 2 |
| Honorary Members | 13 |
| Total | 142 |
| Resignations | 2 |

| | |
|--|-----|
| Deaths | 2 |
| Membership to date | 138 |
| Applications approved and elected to Associate membership by change of by-laws | 14 |
| Total | 152 |

Eleven meetings of the Council were held during the year, making a total of thirty-six held since the foundation of the Institute. The business of the council was covered by 89 minutes making a total of 337 minutes. The chief items covered by the minutes were:

1. The election of 10 full members and 14 Associate members.
2. The issue of *The Journal*, with Dr. E. Deville as convenor of the editorial committee and Mr. Alfred Buckley, M.A., as editor.
3. Resignation of Mr. A. H. Hawkins as secretary-treasurer.
4. The revision of the by-laws and the preparation of a Charter of Incorporation.

There are some \$355 of fees in arrears and it is hoped that the members affected will pay up. We as engineers, surveyors and architects join this Institute not for any benefit that we may ourselves receive, but in the hope that by combining our efforts in a movement which is fundamental to our proper national development we may be of some public service in our day and generation.

ANNUAL DINNER.

The annual dinner was held at the Chateau Laurier on the evening of Friday, May 12th, with the vice-president, Mr. Noulan Cauchon, in the chair in the absence of the president, Dr. Deville. At the close of the dinner Mr. Cauchon expressed regret that Dr. Deville was not able to be present and spoke very appreciatively of the loyalty and service given by Dr. Deville since the founding of the Institute. The Hon. Rodolphe Lemieux, Speaker of the House of Commons, had made a provisional promise to be present and address the members and guests but telephoned to say that it was impossible for him to leave his duties. The vice-president regretted that family bereavement had prevented the attendance of Mr. J. P. Hynes, the president elect. Mr. Hynes was to have spoken on "Where the Responsibility for Town Planning Belongs." The vice-president was glad to announce that Mayor Plant, Dr. Adam Shortt (Honorary Member) and Mr. Thomas Adams would address the assembly.

Mayor Plant.

At the call of the Chair Mayor Plant spoke briefly on the town planning situation in Ottawa. He was deeply interested in town planning as, he believed, every mayor should be. Reference had been made in the chairman's address to the town planning aspirations of Point Grey, Vancouver, a municipality in its youth. That was the time to begin town planning. In Ottawa some mistakes had been made in the past for which perhaps preceding councils were not so much to blame since little attention had been paid to town planning in the early days. In 1914 the city of Ottawa and the Federal Government joined hands on a scheme for the planning of the Federal District and splendid plans were drawn up, costing \$70,000. Apparently no committee had been appointed to carry out the plans and nothing was done. Indeed the Government was the first to break the plans in the erection of the Hunter building, which was done in contravention of the plans and if the Government so proceeded it could not be expected that the municipality would do much better. A Town Planning Commission had been appointed and every member was keenly interested in the future town planning of Ottawa. Of this commission Mr. Noulan Cauchon was chairman and he had already done more for Ottawa than most people realized and he had done what money could not buy. He had drawn up plans which would not cost much money to execute and would prove a splendid economy for the future of Ottawa if they were carried into effect and make the Capital city a better place in which to live. Ottawa had perhaps not done so much as it might have done but it was necessary to carry on in an economical way. The City Council was entirely sympathetic with the work of town planning. The work was still at the beginning but there was much promise for the future. Through the efforts of Mr. Cauchon people were now coming forward and actually offering land free for town planning purposes, along the river bank, with a view to a splendid driveway. This was surely some indication of a real awakening to the importance of the movement. Town planning also involved better housing for the purposes of health and the proper location of industries and such activities as junk shops and incinerators which should all be in their right place. The Council had often been puzzled by problems of this nature and had been glad to call in the assistance of the Town Planning Commission. Mr. Cauchon had received the very sympathetic co-operation of the Town Clerk, Mr. Norman Lett. The Mayor welcomed Mr. Thomas Adams back again to the city and referred appreciatively to the planning by Mr. Adams of the Garden Suburb of Lindenlea. He was convinced that Lindenlea would justify it-

self when sufficient time had been given to it to settle down. It was something worth while to have provided a new and attractive suburb of 150 homes. The Mayor hoped that the cross-town railway tracks would be removed in the near future, after the arbitration proceedings had terminated.

J. P. Hynes, President.

The chairman announced the results of the election of officers at the close of the Mayor's address. Mr. J. P. Hynes of Toronto was elected as the new president and the three vice-presidents elected were Noulan Cauchon, James Ewing, and W. A. Begg. Mr. Cauchon asked that a note should be sent to the president regretting his absence and the bereavement that had come to him. Mr. Hynes is an architect of the first rank in Canada and for many years has been in contact with town planning problems. He has been a great worker in Toronto and has been largely instrumental in founding the Ontario Town Planning and Housing Association in Toronto, of which he is president. Mr. Hynes' address was forwarded to the secretary and is presented on another page.

SOME PRINCIPLES OF TOWN PLANNING

ADDRESS BY MR. NOULAN CAUCHON, VICE-PRESIDENT OF THE TOWN PLANNING INSTITUTE OF CANADA.

Chairman in the absence of Dr. E. Deville, President

We are met in the Capital for the third annual meeting of the Town Planning Institute of Canada and may realize with encouragement and satisfaction that our efforts to bring order into the important work of city building have not been entirely fruitless.

The modern crowding of cities is an evil thing which can bring no joy to anyone except to the unsocial man who desires to make money out of the intensive use of land without consideration for the welfare of those who use it or of the community which has given it its value. Land sweating has developed the slum. The illumination—might I say the conflagration of human suffering and degradation—caused by the slum reveals the call and the mission of town planning as the technique of sociology. Curing our incipient slums and better, preventing their inception, is not a prerogative of charity, it is a function of economic equity no less than of moral responsibility—it is elemental to the survival of the race.

The community is a functional organism for the

maintenance of community life—which is but the collective life of individuals wherein congestion is the warning symptom of disability which, if unheeded, leads to deterioration and death—individual, civic and national.

Organic planning functions through ethics, economics and art as indivisible manifestations of Natural Law—of the first law of Nature—the maintenance of life.

Town planning is the professional application of knowledge to the ends of social betterment. It is doing things; the disposing of land and its subdivisions; its street widths; regulating the use of land by zoning; securing access of air and the rays of the sun to dwellings; it is the securing and maintaining of healthy conditions of life for dwellers in city and country; it is the providing of efficient conditions for work and production—it is, moreover, vindicating men's right to the amenities of life and shielding us from that retribution shadowed in Markham's poem "The Man with the Hoe." Among the "immemorial infamies" which have made of man "a monstrous thing, distorted and soul quenched", none has been more infamous than the city slum.

The future of Canada is of deep interest to us all. We are informed of its natural resources upon which to build materially but our greatest concern should be the human energy of its citizens which will determine the application of those material resources and the resultant moral, physical and intellectual life of the nation. It is elemental to survival that we guard carefully our inheritance in material and men and that the stream of immigration which we permit to mingle with our own be scientifically sifted at our gates and, when admitted, that standards be not lowered by overcrowding and bad housing.

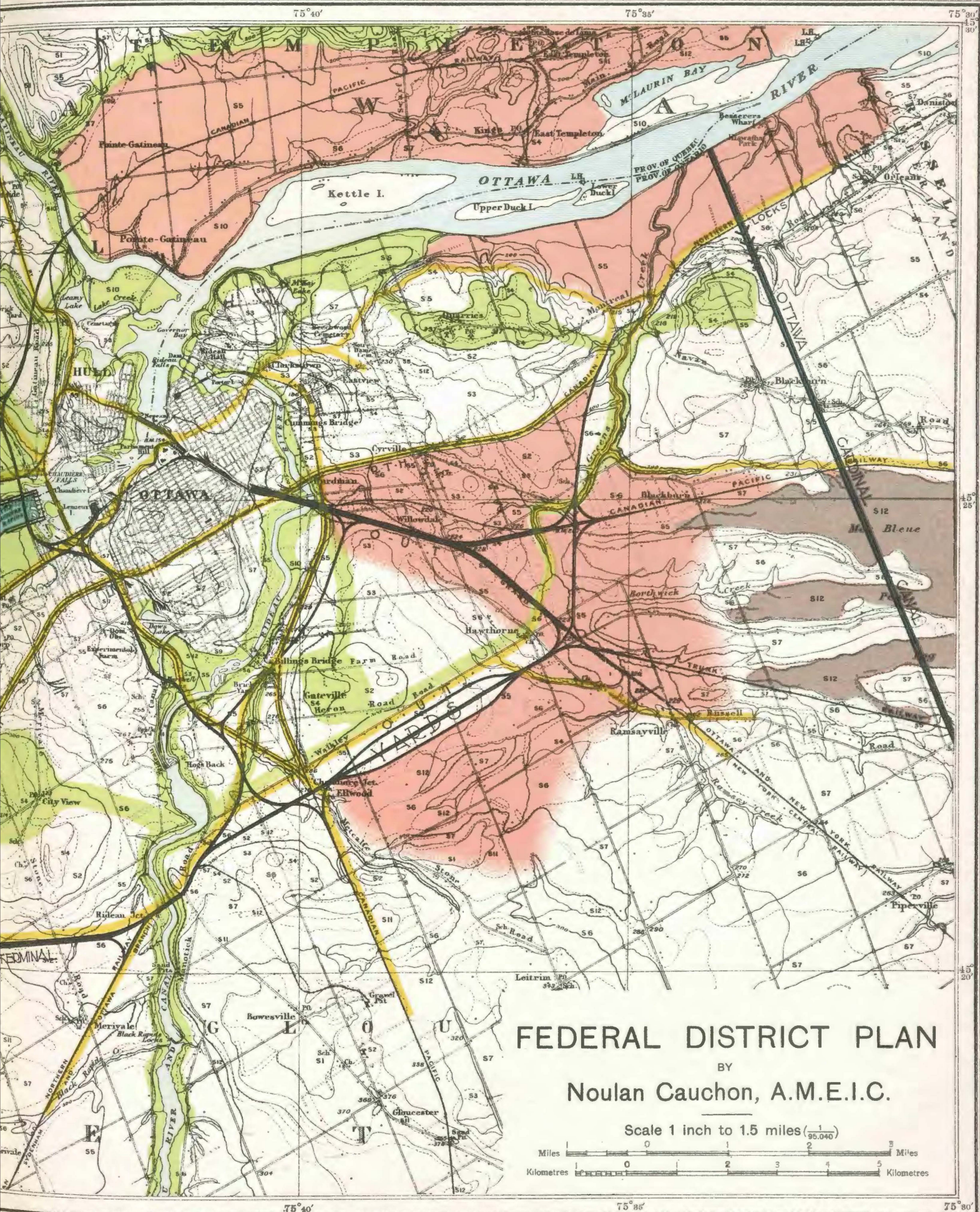
The modern tendency towards extreme subdivision of labour and specialization imperils true perspective—the broad outlook. It engenders a conceit of industrialism that skill and production—material aims—suffice as an end in themselves.

The professions pioneering in the path of town planning may realize that not in their knowledge itself but in its relative application, though oftentimes entailing much sacrifice, lies ultimate achievement. A rational being demands a philosophy of life, a justification of its existence and of its abidance—which needs be at least consistent in means towards a goal and survival.

It was recently advanced publicly, in Ottawa, as against the town planning scheme that in its extent it would cost an impossible hundred millions. Well, in the ordinary course of events there is spent by the city and the government four or five million dollars a year in the city. In about twenty-five years a hundred millions will have been spent more

VANCOUVER
TOWN PLANNING
COMMISSION





Canadian Mountains National Park, in dark green; other park areas
parkways as proposed, in light green
St. Lawrence International Deep Waterway, in black.
Industrial districts, in red.

BASED ON A MAP PRINTED BY THE DEPARTMENT OF MILITIA AND DEFENCE.

or less aimlessly here. Is it not worth while planning to spend so much in a purposeful manner and get a cumulative result? Town planning, properly understood, means obtaining the most for our money—it means fundamentally economic engineering, human efficiency and production and more contentment and happiness through extending the amenities of life.

I would recall the words of Burnham:—

Make no little plans; they have no magic to stir men's blood and probably themselves will not be realized. Make big plans, aim high in hope and work, remembering that a noble, logical diagram once recorded will never die, but long after we are gone will be a living thing, asserting itself with ever-growing insistency. Remember that our sons and grandsons are going to do things that would stagger us. Let your watchword be order and your beacon beauty.

Directing your attention to local efforts I may mention that the universities of McGill and Toronto have undertaken a share in the responsibility of teaching the elements of town planning as a science of civics. The short courses in civics and town planning at the University of Toronto during January of this year were attended by engineers, architects, landscape artists, surveyors and municipal officials and experts in actual practice who will carry back to their work wider vision of the service they can render the community.

The official help that can be given to town planning lies almost entirely with the provinces who under the B.N.A. Act control their own lands and those conditions which in the nature of things constitute the basis of town planning. This applies likewise to our capital which we have long hoped to see enjoy the benefits of a Federal District. Ottawa and Hull and their surrounding districts, which, owing to the usual lack of foresight have grown in our unfortunate casual, haphazard manner, still afford all the elements for the remaking of a capital worthy of the Dominion of Canada. Here again the political disabilities of the B.N.A. Act may be overcome by the creation of an authority to control merely physical features and public services. Action in this undertaking is the prerogative of the Parliament of Canada.

Further, the creation of a Federal District and its planning should offer the opportunity of making its directed evolution the national school of town planning. The provinces could then establish scholarships open to the practising professional men and to the students of their universities, enabling collaboration in the work at Ottawa, and a return to their own fold with tested ideas of civic regeneration.

The nucleus of such a national school of town planning might very well become to Canadian progress what l'Ecole des Beaux Arts has become to France, an institution of Dominion-wide benefit.

To those of us who are in the midst of the work there come moments of gloom at the apparent inertia of progress but we have to remember that the future of town planning lies in awakening the public to its own destiny. And happily there are not wanting signs that the sound has gone forth. News comes from one of the outposts of Canada that the municipality of Point Grey, Vancouver, where a great university of the Pacific coast is now in its youth, that the new town which will grow up in its vicinity is to be developed on town planning principles. In Saskatchewan and Manitoba there are signs of encouraging activity and on a hundred city councils there are men who have seen the wider vision and will not be content until the wiser method of town building is adopted.

ONE METHOD OF FINANCING TOWN PLANNING

BY DR. ADAM SHORTT

The Annexation of Ill-Planned Suburban Areas

At your last annual meeting I pointed out the great necessity for the municipalities, and especially the larger ones, to take in the marginal rural areas preparatory to the development of the cities of the future. I enlarged on the fact of the prospect of extension and stated that the population of modern countries is largely concentrated in the cities and in future will be even more so. The "back to the land" problem is a question of affording residence in the large rural areas adjoining the centre. What is necessary primarily is prevention of the building of shack towns and slum areas outside the city limits, which are subsequently taken into the city and enormous sums of money spent upon them. This process will go on eternally if the city has no control over the areas adjoining, and the citizens will pay the bill for their bad development. If the city has a sufficiently large area it can provide against this misfortune and can have the suburban or rural area properly laid out. This will not involve the spending of any considerable amount of money, because, if the area is laid out and the plans registered people can go on farming the land. Then when the area is broken up for building purposes the work can be done in accordance with the plan.

Question of Finance.

We all know that the development of country and city has been going forward for a century and a

half-by boom periods and slumps. We know the way of frantic subdivisions of land, the traffic in "lots" and the building of a house here and there; then the opening up of miles of streets, sewers, pavements, etc., all in a desperate hurry. That is not good planning nor is it good financing. This method has developed the evil of land speculation but it gets nothing out of the speculator. The chief trouble here is that no money is collected from the first owners of the land. The single tax cities in the west really collected little money from original land owners or speculators. The land speculators got themselves elected in order to boost the assessments. They were quite willing that the debts of the city should be charged against the land—when they were through with it. When the boom period was finished they would be there no longer, or would be at least prosperous enough to pay up where they were caught. The speculator divides up his land and has complete control of it just long enough to enable him to reap net profits from it. It is assessed one year and only taxed the next year and the speculator is out before the land tax is demanded. These bouts of prosperity come to an end and extravagant liabilities so lightly incurred during a period of rapid advance cannot be met by those on the ground when the time of stagnation comes.

Tax the Speculator in the "Boom" Period.

What is wanted is a tax that will tax the speculator. This would not be a case of jumping on a man simply because he was dealing in land. Not at all. It is right that, during this period of exceptional prosperity for those dealing in land, the municipality should get a large slice of the profits of that prosperity *at that time*. The cities should be authorized by the provinces to add to the registration of a transfer of land the price at which it is transferred. Would false prices be registered? No, because it is to the interest of the buyer that the price entered be high so that the margin on the next sale be small, and of the seller that the price be low so that his tax payment be small. Hence there will be no false entries. The slice to be taken by the municipality should be in proportion to the increase between the last sale and the next sale. With every transfer, therefore, there would be a tax upon the amount of increase in price, which would be perfectly fair because the community has created the increased values. I suggest that only the transfers registering an increase of price above 10 per cent should be taxed. If all above that figure were taxed, even if the boom lasted only six months, everybody would be caught and land would be taxed at the right time, that is, the time when big profits were being made. If the tax on increases from 10 per cent to 100 per cent were made within the period of a year

you would take at least 50 per cent of the increment. If the increase were 200 per cent you would take 60 or 70 per cent and still leave the investor over 100 per cent on his money. The shortness of time between the sales might also be considered and the taxes might be stiffer on short time transactions. The man who did not care to transfer, that is, the man who had his own home and did not want to sell, would not be disturbed and would not be penalized for making improvements.

Land Without a Market is Worthless.

If a law of that kind had operated in the west in the boom time the cities now buried in debt would have their 70 to 80 per cent of the profits on the sale of land at their disposal, to make improvements at the time they were needed. Land without a market is not worth anything at all. If you could give a man a meal that would last ten years there would be an immense drop in the price of food. But you *can* outfit a man with land once and for all. If he has enough for his house and property he may not want any more. When scarcely anybody wants any more land and there is no further expansion of the city, what is the result? There is no demand for land and therefore it is worth little or nothing.

The city of Victoria, B.C., is likely to follow most of the other western cities in going back to a rational system of financing the city. The people could not pay their taxes on land and could not make anything out of the land. The city had nearly \$3,000,000 worth of land and was receiving practically no revenue from it. Not only were they not collecting taxes but the land was worth very little. When the tax sales occurred the lands were sold for a mere bagatelle. They had three tax sales. In 1919 they got 50 per cent of the assessed value on what they sold; the next year only 30 per cent and the last year only 11 per cent. They were assessing land at three, four and five times its market value. If a man paid only \$230 for a lot he had still to pay taxes on \$800 to \$900 of assessed value. It was said: "If you let the lots come down to market rate the city will get no revenue." The city was drifting into a financial crisis with plenty of citizens and lots of potential revenue. But the taxes were almost entirely on the land. Nothing could be done, it seemed, but wait for more people to come to the city. That, of course, was an absurd situation which it was well to abandon.

You can, however, get money for town planning expansion out of the period when there is a rapid increase in values, out of the turnover on land at such a period, and you can do it legitimately. That is my suggestion for financing town and city expansion, but not for continuous annual revenues.

ANNEXATION

Mr. Thomas Adams, at the call of the Chair, dealt with the problem of annexation of suburban areas and pointed out that this problem was loaded with difficulties because in most cases annexation was adopted too late. Uncontrolled development of these areas in the interests of land speculators left them without adequate provision of public services such as water mains and sewers and when, in the interests of public health, something had to be done this something was done at the expense of the city taxpayer. The city of London, Ontario, had annexed a large territory which was almost breaking the backs of the taxpayers. The city of Toronto had spent millions of dollars on large annexed areas and the idea was now afloat that it did not pay to annex. But annexation was inevitable and the city could not escape from it if it were to grow. The time to annex was when the lands were farm lands. Mr. Adams had recently presented a town planning report to the city of Welland, which had only twelve hundred acres of land for nine thousand persons. He was suggesting that the city should have eleven thousand acres so that it could control its suburban development. In the eleven thousand acres there were five or six hundred already subdivided. Those subdivisions lacked sewers and water mains and the city would have to provide them if they were annexed. He was advising against annexation unless the city were allowed by the province to take in ten times the area of those subdivisions to compensate it for the outlay. The provincial government was willing that the city of Welland should annex that bad development, which the province had permitted to grow up, at a fixed assessment, but if the city did this it should be allowed to take in seven or eight times the area by way of compensation. The city of London had annexed a large area at a fixed assessment thinking thus to attract industries but the land owners in the neighbourhood had simply raised their prices in order to take advantage of the fixed assessment. The whole process of land speculation was wrong *because it was waste* and that was where the town planner came in. He had to work for a system that prevented waste and promoted efficiency and general well-being.

Speaking of Ottawa Mr. Adams said that he had never lost an opportunity to emphasize its great natural beauty, but he had still to say that its structural beauty did not make one feel that the citizens had risen to their opportunity. Anyone who stood on the terrace of the parliament buildings would see that the whole facade of Wellington street had been spoiled by allowing the backs of buildings on Sparks street to rise above the buildings on Wellington

street. The smallest amount of civic care and control would have prevented such an incongruity.

THE MONTREAL SITUATION

Mr. James Ewing, Vice-president, stated that the recent town planning conference in Montreal was having a wonderful effect and the aldermen were catching on to town planning ideas in a very gratifying way. There was a demand for preservation of trees, the reservation of certain streets for residential purposes and the widening of streets, and the members of the government were expressing active sympathy with the movement. A "good roads" campaign had been started and in this matter he thought the province of Quebec might be said to take the lead in Canada. It was not unlikely that before many weeks were over a town planning commission would have been formed in Montreal.

THE REPORT FROM TORONTO

Mr. H. L. Seymour reported that the Ontario legislature had conceded important amendments to the Municipal Act of a town planning nature and the Toronto Civic Guild with other organizations was pressing for further legislation to simplify and extend town planning powers in Ontario. The Ontario Town Planning and Housing Association had asked for definite action from the government and Premier Drury had promised the appointment of a committee to deal with the matter. There was also a significant move among the Ontario land surveyors with a view to town planning development of the townsites of northern Ontario.

THE AIR SERVICE

Mr. J. A. Wilson, Secretary to the Dominion Air Board, spoke briefly on the work of the Air Board and expressed much gratification at the encouragement given by the government and the enthusiasm for the work manifested by the members of the service. The board had also received the heartiest co-operation in their work from members of other and allied services of the government. He paid tribute to the wonderful natural beauty of Ottawa and declared it was easy to recall the words "Earth hath not anything more fair to see." On this magnificent site, however, it was not always gratifying to see what man had done and he did not wonder that men like Mr. Cauchon should be so keen to see that more mistakes were not made in the

future. Even now Ottawa had a wonderful chance to become a beautiful city, a greater chance perhaps than any other capital in the world.

The progress of the Air Service had been to a very large extent due to the encouragement received from federal, provincial and municipal sources, to the keen enthusiasm of the members of the service and to the co-operation of the allied branches. Canada, had, therefore, been able to apply the science of aircraft to civil uses and might in this respect be said to be in advance of the world. Tributes were coming from all quarters to the efficiency of the service. They had been able to do things without the expenditure of much money. The amount of work that could be done in the present year, judging by the tremendous demand for air service, was only limited by the amount the government was willing to spend and he was glad to see that the estimates had been passed and that members of parliament were heartily in favour of further extension.

WHERE THE RESPONSIBILITY FOR TOWN PLANNING BELONGS.

By J. P. HYNES.

Chairman of the Town Planning Institute of Canada.

That Europe with its population divided into classes and masses—and all this has meant in the control of property—should fail to provide adequate housing for its citizens is not surprising to Canadians. To them it appears to be explained by the trammelling influence that such a state of society imposes. That Canada with all such influences ostensibly annihilated should also fail in this respect and even keep pace with Europe in the development of slums makes it evident that the evil is not to be overcome by the political and social emancipation of the individual and that the house problem is not an individual but a national responsibility.

The social purpose is to see that every family in the nation is provided with a dwelling wholesome socially, sanitarily and economically.

The first step is to ascertain whose responsibility it is to deal with the house problem. As already stated the responsibility is national and may be illustrated as follows:

The Dominion Government has the responsibility of the self-preservation of the nation against war, pestilence and manhood deterioration and must therefore see that the manhood of the nation is developed and conserved to overcome these national enemies. The first requisite for such development is, without

question, a wholesome home which is an impossibility without a wholesome house.

That Canada divides its Government into Dominion, Province and Municipal Governments has apparently been the reason why none of these divisions has recognized the house problem as its particular responsibility and the action it should take to correlate the responsibility of the other divisions.

The house problem being a matter of manhood and property rights is therefore the particular responsibility of the provincial government which deals with these matters and of the municipal government in so far as the province has delegated its authority to it. It would appear therefore that the provincial government is the one which should take the initiative in dealing with the house problem and in rendering this service equitable to the whole province. To this end, the province should have a department of municipal and community service which would prepare for enactment by the province legislation to govern each kind of municipal activity and community service and administer them under the provincial executive. It is unnecessary to outline the various activities of this department here, but for the present purpose the legislation should cover the subdivision of and the uses to which real estate may be put; the development of transportation facilities within municipalities, not only by motive power but also by adequate thoroughfares properly allocated and controlled; standard requirements for housing and the empowering of municipal boards of city planning, transportation and housing.

Such legislation should be administered by the provincial Department of Municipal and Community Service through a division of town planning, transportation and housing. This division would sanction all municipal schemes under these headings, see that a minimum standard of service is maintained throughout the province, adjudicate between municipalities and between municipalities and individuals when conflict arises on any scheme proposed or undertaken, and act for minor or rural municipalities that have not boards of their own.

Municipalities should not be given special charters but be governed by the aforesaid legislation covering their various activities and should maintain a board of city planning, transportation and housing. This board should prepare all schemes under these headings for adoption by the municipal council and for sanction by the provincial Department of Municipal and Community Service and administer all activities under these headings, undertaken by the municipality.

The responsibility of the province to be of service to the citizens is the same for large or small urban or rural municipalities and the housing legislation

must equally facilitate the solution of the house problem in the large cities, factory towns and agricultural districts.

The obligations of the governments are not fully discharged by providing legislation only as illustrated by the following method for providing houses. Similar methods should be used with proper modifications for town planning.

After establishing a system whereby housing may be standardized as to sanitation, accommodation and construction, they should make this housing available to the citizens throughout the province who are least able to provide it for themselves in such a manner that the house will be maintained against deterioration and the occupants sustained against adversity. It is only when such conditions obtain that the home can properly develop a high standard of manhood.

The provincial government should supply the capital, not to individuals but to municipalities. The amortization of this capital, however, should be borne equally by the Dominion, provincial and municipal governments and not made a charge against the housing developments.

The Dominion government should co-operate with the provincial government because, as already stated, its responsibility is paramount and by co-operation, duplication of effort would be avoided.

The provincial government should co-operate as it is the authority which deals with property and manhood rights, under which housing must be classed. It can also best maintain housing in time of peace and keep the nation in a state of preparedness against the national enemies,—war, pestilence, and manhood deterioration.

The municipal government should co-operate because the actual housing takes place in its territory and there the immediate benefit of adequate housing is felt, in the improvement such accommodation gives a community sanitarily, physically, mentally and morally.

The town planning, transportation and housing board of the municipality, acting as proprietor, would be in a position to erect and rent houses on a cost basis instead of on the speculative basis of private ownership. It would also standardize the construction and build houses in large numbers at one time and these economies would be reflected in the rental charges. Since the board is a municipal institution and the tenant a municipal voter, any objectionable paternalism is overcome in the board acting as landlord or as trustee for any tenant's saving fund if one should be established.

Having outlined the part of the governments in the house problem, it remains to consider the question from the point of view of the occupant of the house. The occupant of the house invariably is a

wage earner without any other resource and can only buy the house by paying for it in instalments. Having become an owner he will have to take the hazards of that position, some of which are the following:

Having neighbors who through misfortune or neglect let their properties deteriorate rapidly, causing other property to suffer.

He may not be able, through misfortune, to afford to keep the property in such repair as would avoid undue deterioration and may be forced to drop the property or sell at a disadvantage.

He may be unable to realize readily and avail himself of a better position elsewhere and owing to increase or decrease of family he may be kept in a house of unsuitable accommodation and find it difficult to change.

Having for years struggled to buy the house he may find for the above reasons and others that the property is much less valuable than anticipated.

For which reasons, a system more attractive to him and more likely to solve the house problem for the occupant of the house and the community should be adopted.

The occupants should be tenants only and their rent should include interest and amortization charges, the latter based on a twenty-five year loan,—taxes and insurance, upkeep charges sufficient to maintain the property in constant repair and retard deterioration as far as practicable, and overhead charges of administration.

The interest charge would be the same as that paid on the provincial bonds and should be lower than mortgage rates by reason of the provincial security. The amortization charges should not be used for that purpose, however, but the retarding on carrying of bonds should be equally divided between the three divisions of the government as already stated, and the amortization charges paid by the tenant should be funded by the board and made available to the tenant under certain conditions such as the following:

The fund should be made available to the tenant when under financial stress, to apply on the rent and maintain the home. It should be available to him in cash when circumstances force him to cease to be a tenant and assist him in his new location to re-establish.

It should continue to be funded, if he remains a tenant, until it equals the value of the house he occupies. After which the interest on it should be used in reduction of rent and should be used in this way for his family after his death or be paid to them as a life insurance.

Should his circumstances so change that he would require greater or less housing accommodation he could transfer to suitable accommodation without

ceasing to be a tenant of the board and adjust his financial arrangements accordingly.

Under this system the wage-earner would have service without hazard and an assurance of properly kept premises to which may easily be added the additional accommodation of hot water and heating from a central plant at a reasonable increase of rent; also recreation and gardening facilities and even neighbourhood clubs.

SECOND DAY

The transactions of the second day covered the discussion of the draft Charter of Incorporation and the proposed new by-laws. A definition of town planning was agreed upon as follows:

Town planning may be defined as the scientific and orderly disposition of land and buildings, in use and development, with a view to obviating congestion and securing economic and social efficiency, health and well-being in urban and rural communities.

A good humoured contest raged about the word "well-being" which was finally allowed to supplant the word "happiness". The American Constitution was quoted in the defence of the beautiful word but it was strenuously contended that this ideal had long since been abandoned in the great republic, and anyhow no man could make another happy. The idealists had to yield.

Mr. Thomas Adams gave an exhaustive account of the actual steps necessary in the carrying out of a town planning project, taking for his special topic the planning of the city of Welland, Ontario, which is now proceeding and for which Mr. Adams is town planning consultant. The address was illustrated by progress maps and served admirably as a demonstration of the practical work of town planning. It is hoped to publish the address in a future issue of *The Journal*.

Mr. W. E. Hobbs, Town Planning Director for the province of Manitoba, was not able to be present but contributed the following valuable paper to the proceedings:

THE SUBURBAN PROBLEM OF GREATER WINNIPEG.

By W. E. HOBBS, L.D.S., M.L.S., A.M.E.I.C.
Comptroller of Town Planning, Province of Manitoba.

The transition from rural to urban conditions in areas adjoining growing cities is usually accomplished with difficulty, particularly where no definite plan or control accompanies it.

In this respect, Greater Winnipeg is no exception to the general rule and a review of the actions of the past that have led to present conditions there may throw some light on the general problem and even indicate what steps should be taken to offset mistakes that have been made, and guard against error in the future.

The Site of the City.

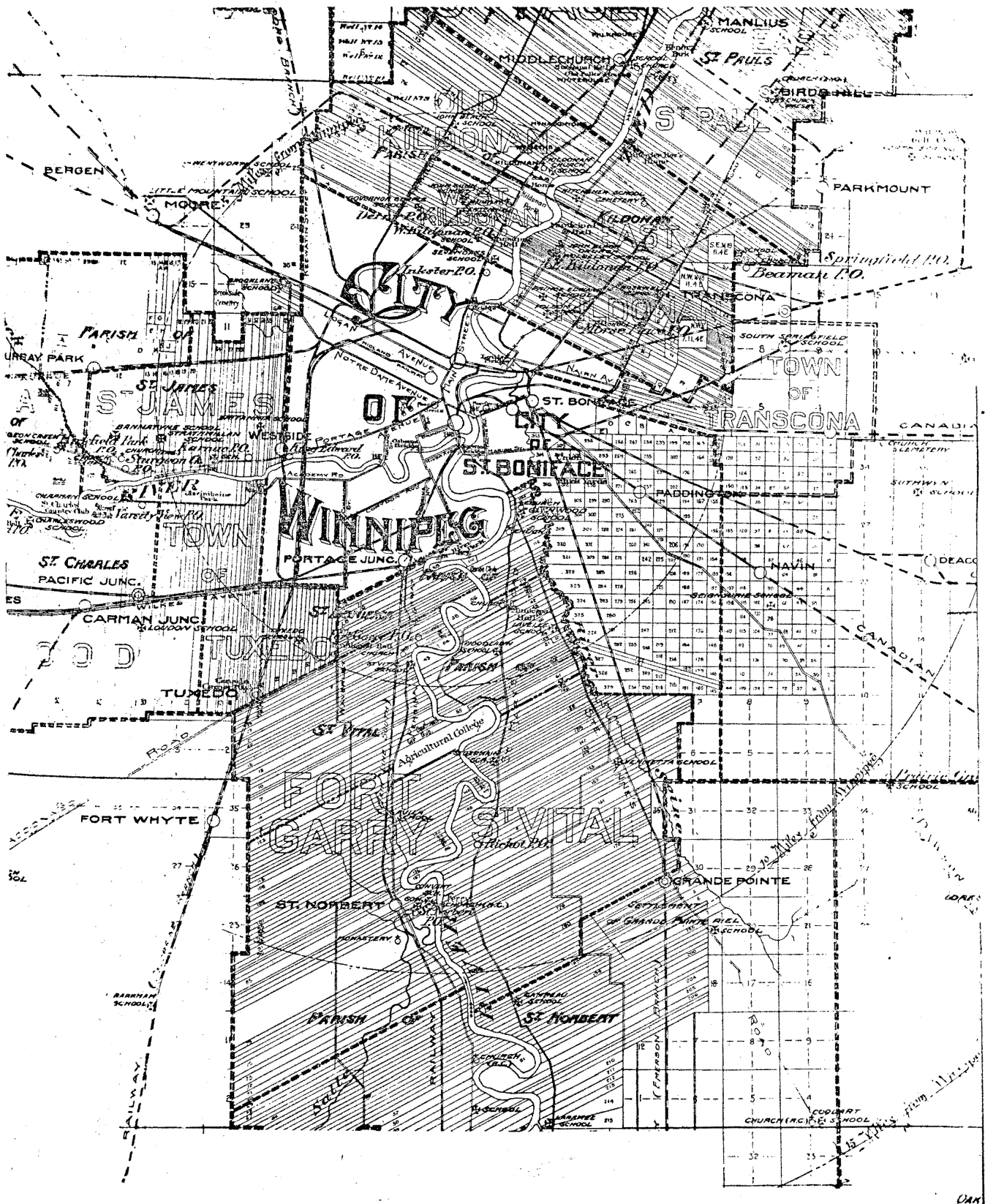
Greater Winnipeg is situated at the junction of the Red and Assiniboine Rivers, on an almost level prairie, only occasionally seamed with a creek or ravine and extending for miles in all directions. In the early days before the general settlement of Manitoba, it was a Hudson's Bay trading post, the site of Upper Fort Garry.

Old Land Boundaries.

Rivers being all important for travel in those days long before Confederation, the lands in the Red River valley and part of the Assiniboine valley were divided into parcels 10 chains wide laid out approximately at right angles to the general direction of the adjacent river and extending for a distance of two miles from it. These were called "River Lots." When settlers commenced to come in and occupy the back areas, these river lots were further extended another two miles to the rear forming what are now known as "Lots in the Outer Two Miles". As time passed portions of the original lots changed hands, until in the surveys made subsequent to Confederation we find that many of the original lots had been divided into parcels as narrow as two chains in width, which extended for two or even four miles back from the river.

Old Trails and Highways.

General travel created trails which were usually conveniently near the river and followed the general direction of the latter on both sides. The perpetuation of these trails was provided for at the time of Confederation, and in most instances they have become the main highways. Road allowances 99 feet wide were also provided at the rear of the River lots (called "Two Mile Roads") and also along the rear of the lots in the outer two miles. Occasionally a 66 foot road along a lot line was provided to connect these main roads. There were thus on each side of the river three main roads approximately paralleling one another, each two miles from the other and occasionally connected by a narrower road at right angles to their general direction.



Influence of Old Land Boundaries on Plans of the City and Suburbs.

Obviously the shape and dimensions of the lots in these "River Belt" or "Parish" surveys, as they were called, had a very marked effect upon the location of streets and the form of the general plans of urban and suburban areas alike, when they came to be subdivided into building and other lots. Main and secondary traffic routes and other streets are everywhere approximately at right-angles to the old main highways. Diagonal roads are very rare and could now only be secured at great cost. The amount of river lot width being two chains, and their length two to four miles, long straight streets 50 feet wide and two to four miles long have become the rule in Winnipeg and district, with lanes 16 feet wide midway between them and lots 99 feet deep fronting on them, regardless of what function streets, lanes or lots are expected to fulfil.

The original land surveys, then, have had a decidedly bad influence on the subsequent urban and suburban plans by causing building lots, streets and lanes to be of uniform dimensions, and controlling the directions of the latter so that adequate provision for diagonal and other highways, which will be required when the adjacent areas are populated, has not been made.

Growth in Population. Winnipeg.

The village, destined to become the city of Winnipeg, grew around the Hudson's Bay Post and spread

from the centre, now known as the corner of Portage and Main streets. By 1891 the population within the city boundary had reached 25,639; and from this time onwards the growth was fairly rapid as evidenced by the following figures:—

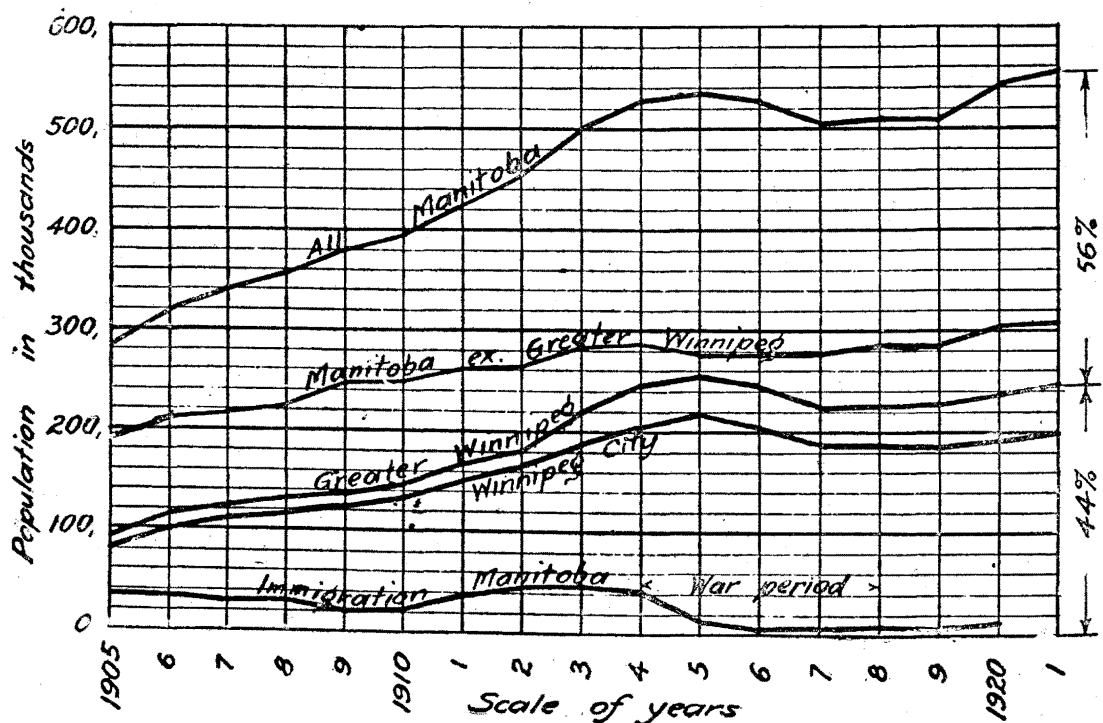
| CITY OF WINNIPEG | |
|------------------|------------|
| YEAR. | POPULATION |
| 1901 | 42,340 |
| 1906 | 90,153 |
| 1911 | 136,035 |
| 1921 | 196,947 |

City of St. Boniface.

The population of the adjoining city of St. Boniface grew from 2,019 in 1901 to 7,483 in 1911 and 13,081 in 1921.

Suburban Municipalities.

With the exception of St. Boniface there seems to have been little development in the adjoining municipalities other than of a farming or gardening nature until after 1905. In 1906, the southern portion of East Kildonan municipality having assumed some urban characteristics was absorbed by the city of Winnipeg and is now known as Elmwood. From this time forward residential areas have developed in suburban municipalities at first slowly, later more rapidly; and then populations have steadily increased and are still increasing. The following diagram shows the growth in population since 1905, and indicates a very marked increase in the suburbs from 1912 to 1915.



The following diagram illustrates the percentage of occupied lands in each municipality. It also indicates the municipal areas in their true relative proportions and the shaded parts shew the occupied

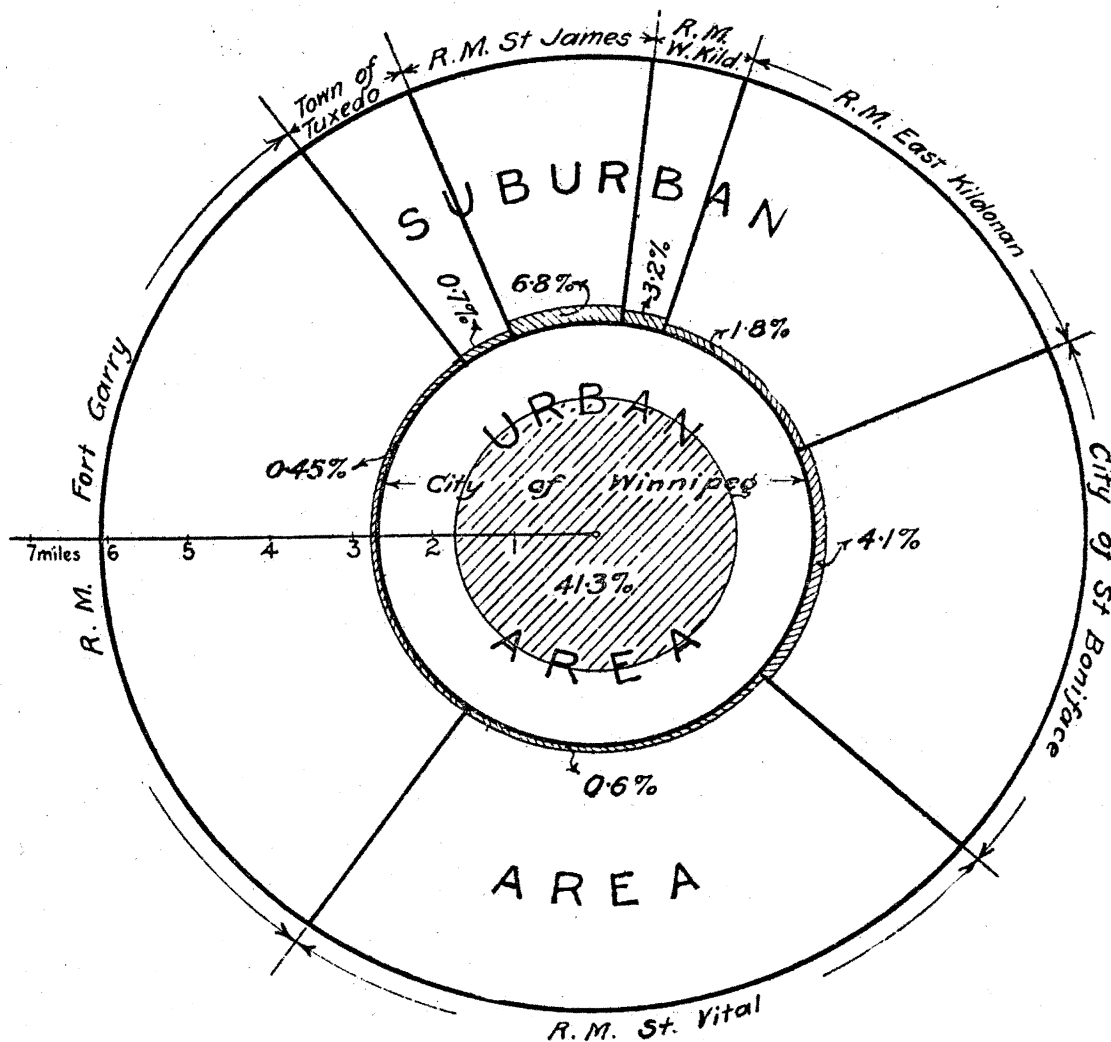
percentage of the total area of each municipality, determined by assuming a distribution of population of 32 persons to the acre.

It should be noted that the rural portions are

DIAGRAM shewing DISTRIBUTION of POPULATION in GREATER WINNIPEG

Percentage of area of each Municipality populated shewn shaded, such percentage being based on 1921 population and an assumed distribution of 32 persons to the acre.

(Town of Transcona, Brooklands Village, R.M.s of Old Kildonan & Rosser not included.)



At 32 persons to the acre

Urban area would accommodate 475,680 persons

Suburban " " " 1,891,488

Total 2,367,168
(Possible)

Population at end of 1921

(Municipal Commissioners' statistics)

196,947 persons

37,575 "

234,522 "

(Actual)

large in some of the municipalities mentioned. This is particularly the case in the city of St. Boniface and the rural municipalities of Fort Garry, St. Vital and East Kildonan; but even so, the number of unoccupied building lots in these municipalities is enormous compared with their populations, as will be later shown.

Greater Winnipeg Population 1921.

The populations of the respective municipalities in Greater Winnipeg at the end of 1921, according to the provincial municipal commissioner's returns are as follows:—

| MUNICIPALITY. | POPULATION, 1921. |
|--------------------------------|-------------------|
| City of Winnipeg | 196,947 |
| Town of Tuxedo | 527 |
| R. M. St. James | 10,467 |
| R. M. W. Kildonan | 3,813 |
| R.M. Old Kildonan | 362 |
| R.M. E. Kildonan | 4,596 |
| Town of Transcona | 4,136 |
| City of St. Boniface | 13,081 |
| R.M. St. Vital | 2,641 |
| R.M. Fort Garry | 2,450 |

Past "Boom" Subdivisions.

Except during the "boom" in the early 80's, there was little subdivision into building lots in the municipalities adjoining the city of Winnipeg until after 1905. From this time forward, however, and particularly from 1910 to 1914, an amount of suburban land was converted into building lots so far in excess of the present and future requirements of the population, that decades will pass before the occupation of many of them may be expected. *While the population increased in hundreds, building lots were created and put on the market in thousands.* A glance at map No. 2 will reveal the extent of the subdivided areas, and the populations in the different municipalities have already been given. Some of the subdivisions have been cancelled, but they are exceptional.

Lack of Control of Subdivisions and Its Results.

Except in regard to the continuation of existing streets, and the manner of staking lots, very little control of these subdivisions was exercised during this period, with the result that each owner dealt with his land in the way that would net him the biggest return. He claimed then, and often the same claim is advanced to-day, that he had a perfect right to deal with his land in any way he saw fit. One asked recently, what was the use of a Torrens Title if he could not do so? It is to be hoped that education will soon eradicate this erroneous idea, for its application in the past has been disastrous. During these years lots and streets were laid out

without regard to the use to which they were to be put. Main and secondary highways, except so far as they were already established, received no consideration whatsoever. What might have been attractive residential areas were spoiled for that purpose. Lands that should have been set aside for industrial purposes were given over to other uses. The diverse requirements of future residents and of the community as a whole received little or no consideration. No parks or recreation grounds were appropriated or apparently even given a passing thought. Most of the things that might be expected to happen where all consideration of the essentials in planning is ignored, did happen and the tragedy of it all is that though most of the lots are not built upon, there has been a scattered development which may be sufficient to fix the form of the layout so that it is doubtful if a more advantageous arrangement can now be secured, except where urgent necessity may compel it in the future.

Why People Went to the Suburbs.

From the years 1912 to 1914 the actual growth of population of suburban municipalities was greater than that of Winnipeg itself. *Even to-day, less than 45% of the lots in the city are built upon,* so that overcrowding could not have forced the people to outlying areas, away from the heart of things, where more time daily would have to be spent in passing to and from places of employment. To the well-to-do automobile owner, this extra distance means little, but except perhaps in the town of Tuxedo, workmen's dwellings predominate in the suburban municipalities. We must, therefore, look for other reasons for this suburban development.

In the first place, building lots could be bought for less in the suburbs than in the city, and the taxes were very much lower in the former, at first. With the growth of the city proper, many families, particularly those with children, wished to get away from city conditions and into the country, so long as they could enjoy the benefits of both. With means of transportation provided by the street railway company, this was possible. Those having lands for sale dwelt upon the advantages of the rural home, and we find many fine houses in the vicinity of the river in all suburban municipalities. But back from the main highways—often a mile or more where land was less accessible and had comparatively little residential value and lots could therefore be sold for very little, hundreds of lots were sold to those who could only make small payments and only afford to build small houses or shacks.. The "own your own home" instinct is just as strong in the family man of small means as in his well-to-do brother, and the possibility of satisfying his desire in this direction is greater in the suburbs than in the city, be-

cause land costs less, and taxes are relatively low, at first. Experience teaches, however, that taxes increase remarkably and country conditions disappear when land has become sufficiently used for building.

Causes of Increased Taxation in Suburban Municipalities.

The lack of efficient control of the number and conditions in subdivisions, the favourable attitude of many people towards suburban residence, the rapid growth in population in the suburb during 1912-1915, and the disease of town lot speculation that held the country in its grip—all combined to foster the creation of more and more building lots up to the year 1915 when the period of depression really set in.

Since then, building operations have been carried on to an extent, particularly during the last two years, but there has been practically no subdividing in suburban municipalities. In the meantime municipal taxes have increased enormously in these municipalities, the reason for which is commonly attributed to high costs resulting from the Great War, too many "local improvements"—sewers, water supply pipes, etc., insufficient population and so on. Many of these municipalities have actually made strenuous efforts to increase their populations in order to reduce their tax rates, but as might have been predicted, have failed to do so. An analysis of the present conditions in one of these suburban municipalities, considered quite sound financially, may show the real state of affairs.

Too Many "Town Lots".

In this municipality there are nearly 27,000 building lots, while the actual population in 1921 was only 6,396 people. In all, there were at that time 1,684 buildings, including schools and other public buildings in the municipality. Obviously there is a surplus of at least 25,000 building lots.

Increase in Public Expenditure caused by Subdivisions.

When used farm lands are withdrawn from production to be divided into building lots that are not actually required for building purposes the result is economic loss *to the community*. Obviously one source of loss is additional clerical work, since a multiplicity of parcels of land involves corresponding additional entries and work in tax and assessment trols.

Increased Taxes Caused by Tax Sales.

Then the probability of lands reverting to the municipality through tax sale proceedings is greatly increased by division into small parcels. Acreage tracts seldom revert in this way. The parcels are too

large, and even in times of depression can be disposed of for at least more than the two years taxes due; but not so the town lot; it is a comparatively small thing and when acquired in "boom" times as a speculation it is just as likely to be given up when years of depression follow one another. The municipality under consideration has been forced to acquire title to over \$400,000 (assessed value) of lands in this way, while the total assessment of all the lands within its boundaries is little over \$5,000,000.

During good times lands in tax sales are readily acquired by those having money to invest; but in times of depression there are frequently no buyers for the poorer lands and the municipalities are forced to take them over themselves. The costs involved in acquiring title are sometimes in excess of the value of the lands themselves. It would obviously be useless to levy taxes against lands thus acquired, as they would have to be paid out of the general tax revenues and therefore they are commonly exempted from taxation, municipal officials fondly hoping that some day it may be possible to sell them for the cost and carrying charges. *Where there are local improvement charges against such lots, they have to be met out of general revenue.* This was largely the cause of the town of Transcona being placed in the hands of an administrator some two years ago. *Tax sale lands bought in by the municipality reduce the taxable area of the municipality, and therefore, increase the rate.* The less desirable the subdivision the more likely is the municipality to be forced to buy parts of it in, and the less chance there is of its being able to dispose of what it buys to advantage.

Effect of Form and Location of Subdivisions.

Suburban municipalities are learning by bitter tax-sale experience that the interests of the rate-payers require that lots in subdivisions be suitable and well situated, and new streets dedicated thereby be well located and economical to improve, for, if they are not, a large proportion of the lots may be back on their hands.

Another requisite is that the area subdivided be along the line, and within the radius of probable development, for if it is not so located it may be the cause of unnecessarily heavy expenditure and grave difficulties to future administrations.

Difficulties an Outlying Subdivision may Cause a Municipality.

In the suburban municipality under consideration an area over a mile from the main traffic highway was subdivided into 25' lots during the real estate "boom" and largely sold to workmen, who in the meantime have in many cases built small houses on their lots. While there were only a few houses in this section no difficulties arose; but **there are now**

so many that it is absolutely necessary in the interests of public health that sewer and water facilities be provided. Building development in this municipality has chiefly taken place in the vicinity of the main traffic highway along which street cars operate. To connect this outlying area, therefore, involves the construction of nearly half a mile of sewer and water mains that will serve practically no one, but which will nevertheless have to be charged up against the lands affected. This difficulty has already held up the work for several years but it will not be possible to delay it much longer.

There can be no doubt, then, that a municipality is vitally and financially affected by the location of subdivisions. If they are outlying and beyond the range of normal development, many of the lots are likely to revert to the municipality in hard times if not built upon, and if built upon, it will be a difficult and expensive matter to provide the area with necessary services when its development has reached the stage to make the installation of the same imperative.

Unnecessary Costs Due to Scattered Development.

Where the custom of the people is to buy land, particularly building lots, not to use but to re-sell when the price goes up and where there are ten times as many lots as are actually required for buildings what buildings are erected, are very unlikely to be grouped together. If the number of building lots were limited to the requirements more orderly and economical municipal development would follow. In the past, municipalities have installed many of the utilities and services the cost being charged back against the lands affected, the payments being spread over terms of years of varying length. When one or two houses had been built on any street it was usual for the owners to apply to the council for the construction of road grades, sidewalks, and perhaps the sinking of a well for the common use. Later on when more houses were built and the congestion became greater further applications would be made for sanitary sewers, water mains, street lights, etc. The obvious result was that roads, sidewalks, sewers, etc., capable of serving fifty or more houses were installed for the benefit of three or four, thus tying up a large amount of capital unnecessarily.

The cost of installing public utilities such as electric light is also relatively greater where houses are far apart, and if extra charges are not made to cover this cost the general charges of the service must be increased to all users.

Vacant Lots Served with Sewers and Water Supply.

In the municipality under consideration on five of the most built-up streets served with sewer and

water, 75% of the lots are vacant, while, considering all of the streets so served, it is doubtful if 10% of the lots have buildings on them. Nevertheless the council is constantly receiving applications to instal sewer and water facilities on other streets.

Though this loose method of development undoubtedly impairs the borrowing power of municipalities, it is not true that the installation of such "local improvements" is always the cause of their present financial difficulties. If many lots so served with "improvements" revert to the municipality through tax sale proceedings, it may seriously embarrass it. In the municipality considered not a single lot so served has reverted. In Transecona, however, not the least contributing cause leading to the administratorship was the number of lots served with sewer and water acquired by the town through tax sales.

It follows, then, that discrimination should be used in the installation of municipal services, particularly those paid for on a basis of frontage and spread over a period of years, since if care and judgment are not exercised the whole community may be called upon to help to pay for them.

Index to Municipal Financial Capacity for Improvements.

This leads to the observation that the ability of a municipality to pay for "improvements" is not truly evidenced by its assessed value, as the latter often includes a large potential-value element. The number of actual residents; or better still, the productive capacity of the residents is a more satisfactory index.

Increase in Population Involve Increase in Services.

As the population of a municipality increases, so the requirements of public health, safety and convenience become more exacting. Existing municipal services have to be elaborated and new ones provided. The secretary-treasurer's and assessor's duties are light when a municipality is largely composed of farm lands, but when the latter are converted into "town lots" and buildings are erected on them and "local improvements" installed then their work becomes heavy and much clerical assistance may have to be provided if they are to cope with it satisfactorily. At different progressive stages in growth police, engineering, building inspection and fire departments will have to be installed. These departments and those previously mentioned will of course grow as the population increases. As the population assumes town proportions more departments will have to be added and soon these services will involve increased expenditure and consequently increased taxes. So long as the increase in property values keeps pace few difficulties are encountered. In suburban muni-

icipalities, however, during the last 6 years, values have not appreciated at anything like the rate of increase in municipal taxes.

The tax increase is due in part to the causes already enumerated, but mainly to the cost of operating schools, which matter has not yet been mentioned.

Increase in Population and the School Problem.

Education is compulsory in Manitoba and school accommodation must be provided for all the children of school age in a municipality at the expense of the rate-payers, whether they own houses or land only, and whether they have children or not.

As on the average one out of every four and a half or five persons is a child of school age, it follows that every increase in population involves an increase in school accommodation.

Again, as school taxes are paid on vacant land as well as on buildings it follows that the average value of new dwellings must be great enough to produce revenue for school purposes equal to the increase in school expenditures caused by the children living in them if the school rate is to remain the same. If the average value of buildings is less than this the school rate will have to be increased; if greater, it will be reduced.

A Case Where More Buildings Meant Higher Taxes.

In our suburban municipality under special consideration 201 dwellings were erected during the year 1921. The average value of these buildings was \$2,302.18. The average number of people per house in the municipality was 3.82, and one out of every 4.5 persons was found to be a child of school age. Each new house would therefore be accountable for an average increase in the school population of 0.85 children. The average cost of educating one child for one year in that municipality was found to be slightly over \$89.00, 0.85 of which amounts to approximately \$75.50. The school rate in 1921 was 26.4 mills, the municipal assessment being about 2/3 of 1914 value on buildings. With an average assessed value of \$1,025 per new dwelling, (exclusive of land), an average additional revenue slightly over \$27.00 per house would be realized for school purposes, whereas the increased school expenditure caused by the increase in homes was shown to be \$75.50. In another suburban municipality where the value of new houses was considerably less they produced on the average \$13.00 per house for school purposes, whereas the increased expenditure involved was approximately \$76. Obviously the difference in these amounts must be spread over and paid for by the whole area, and results in an increased rate. In the former case the average value of new buildings erected would have had to be over \$5,800

to keep the school rate stationary, but it is not to be expected that this high average can obtain.

Costly Dwellings and Industrial Buildings Would Assist.

Property values have not appreciated with this increase in the municipal tax rate and if the latter grows big enough it will have a depreciating effect on values. If cheap dwellings predominate among new buildings the rate is bound to increase. Every costly building of greater value than the average required to keep the rate stationary and every commercial or industrial building that does not aggravate the school situation will assist the municipality. The introduction of industries might assist but their operatives would probably live in the vicinity, so that the question to decide in any given case is whether the increased municipal revenue derived from industrial buildings would be equal to or greater than the increased school and administration costs due to the erection of small homes of the operatives and the industrial buildings themselves.

It is certain in any event that if a self-contained municipal unit is to be run reasonably and economically there must be a reasonable balance between the area occupied by costly buildings and the workman's dwelling area.

In isolated units, this will regulate itself; but in a suburban municipality it will not, as the latter is self-contained for municipal administration purposes, but not for business, commerce, recreation, etc., since its main source of supply is provided by the adjoining city. A suburban municipality would therefore do well to use every means in its power to attract the well-to-do to live within its boundaries by preserving and improving attractive localities for high class residential occupation. Industrial sites should receive similar consideration. Adequate planning would recognize these and other important matters and provision would be made accordingly by reason of which the financial position of the municipality and the welfare of its community would be greatly enhanced.

Suburban Municipalities are not "Self-Contained".

It has been observed that suburban municipalities are not wholly self-contained. By this is meant that for municipal and school purposes they have to be, but for practical purposes—for the purchase of provisions, clothing, and other goods, for repairs of all sorts, for attending theatres, movies, etc., the residents go to the city.

Why Suburban Municipalities Lose Taxes on Business Premises.

Moreover, practically the whole of the working suburban population is employed in the city, and the

incomes, salaries and wages are spent there. Suburban municipalities are so close that city stores can and do deliver goods to them just the same as to all parts of the city itself without extra charge. This has resulted in comparatively few businesses being established in the suburbs, where there would be many in communities of similar size removed from the influence of the city. The suburban municipality therefore loses the taxes on these business premises while the city gains to this extent.

Factors Relieving Municipal Taxation in the City of Winnipeg.

In 1921 the city of Winnipeg collected business taxes, permits fees of various kinds, fines, etc., amounting to over one million dollars or about 12% of the total tax levy. In other words, the burden of general taxation was relieved to that extent. The most valuable lands and the biggest and most costly buildings are situated in the business section in the centre of the city. General municipal and school taxes are levied on these lands and buildings at the same rates as in other parts of the city, though they do not burden the school expenditures in the slightest and bring in far more for general municipal purposes than is expended on them. Again, general taxation is relieved to this extent. In a similar manner, wealthy residential areas, such as Armstrongs Point and Wellington Crescent, produce large revenues for the city because of high property values and are the cause of relatively small general expenditures, particularly for schools, as in these districts there are only one or two houses to the acre. Suburban municipalities, however, have not such means of relieving their rate of taxation at their disposal. Because their residents spend most of their incomes outside of the municipal boundaries the amounts produced by the levy of business taxes are negligible. There are no highly valuable lands and commercial buildings, and no wealthy residential areas. On the average the cost of education per pupil is slightly more in the suburbs than in the city; but even if it were the same residences in the former have not the means of relief from school taxes enjoyed by those in the latter. The taxes in the former are relatively heavy on big and small houses alike and will be heavier as the population grows.

Suburban Municipalities Compared with Ward cut off from City.

Suburban municipalities are in the predicament in which an outlying residential ward would be if it were cut off from the rest of the city and had to fend for itself municipally. Such a ward would not then get the benefit of business taxes and surplus revenues for municipal and school purposes from commercial and wealthy residential areas. Yet, we may sup-

pose, its residents would continue to work in the city and spend most of their money there. But as the taxation within the ward would now be relatively higher than that within the city, many residents might try to move out of the ward into the city, which would probably have the effect of depreciating property values. This would be a case where an increased tax rate was not accompanied by increased property values. And it is difficult to see how, under existing conditions, property in suburban municipalities can escape the same fate.

Tax Rate in Suburban Municipalities Bound to be Compared with City Rate.

Comparison is always bound to be made between the tax rate in the suburban municipalities and the city. To maintain a balance taxes in the former should be slightly lower than in the latter. They cannot be higher unless some special attraction compensates the taxpayer for the higher charge.

Taxes in many of the suburban municipalities are already relatively high. Under present conditions increase in population means increase in the tax rate. When the amount of taxes levied on similar properties becomes higher in the latter than the former—in view of the fact that less than 45% of the lots in the city are built upon—what is likely to happen? Those who can leave will return to the city and new people will not come to the suburbs unless they are willing to pay the additional cost involved for the privilege.

Allowable Maximum Tax Rate in Suburban Municipalities.

The point in the growth of a suburban municipality where this working maximum of taxation is reached depends upon the average class of buildings erected. If the workman's dwelling area predominates the maximum will be reached when the population is smaller than when expensive homes are the rule. The latter will more than cover municipal expenditures made on their account; the former seldom, if ever, can. Commercial, high class residential, and sometimes industrial areas will assist and make a larger population possible before the maximum tax rate is reached. A suburban municipality is, therefore, justified in using every means in its power to attract these types of occupation. The question of industries, however, should be carefully considered. It is not in the general interest of Greater Winnipeg to be hemmed in on all sides by industries.

It is therefore as harmful to the interests of suburban municipalities to foster promiscuous building operations as it is to permit the creation of endless rows of building lots that will not be required for years. Both may materially assist individual

owners but *not the community as a whole*. The law of supply and demand will determine in each case how far such activities can be carried with economy.

Assessment of Garden Lands.

It has already been observed that on many suburban municipalities the taxes on dwellings are relatively high. This is most readily seen by comparison of similar properties adjoining a common city and municipal boundary. It has been pointed out that the assessment for municipal purposes of vacant lots and acreage is based on probable market values which anticipate the future considerably. Reference has also been made to the fact that these vacant lands assist the tax revenue very considerably, because of their relatively high assessed values, and relieves the built-upon lands to this extent. In the "boom" days, the owners of vacant and farm acreage lands did not object to the increase in assessment, as they expected to sell on the generally accepted potential value basis when it got high enough; and, moreover, the inevitable increase in the tax rate had not yet asserted itself. Years of depression and a steady increase in taxation have however come together and in many cases the owner-farmer or gardener of acreage now finds the burden of taxation intolerable and himself no longer able to work his land on a paying basis. If his land is relieved the taxes on the homes and buildings will be correspondingly increased, which in some cases would result in higher taxation in the suburbs than in the city. If, on the other hand, the assessment remain as it is the owner of garden lands may subdivide and attempt to dispose of his holdings in that way; "pay the piper" in taxes until he can sell to advantage; get his assessed value reduced; or let his lands go in tax sale. We have already seen that the creation of more building lots where there is an overwhelming surplus will only aggravate the situation; and moreover, there is at this time no demand for lots, except for those actually required for immediate building purposes. The owners of garden lands however dislike paying the heavy taxes, in most cases, but have no intention of letting their lands go by tax sale. Many appeals against the assessment have been lodged but it is significant that what are claimed to be a fair assessed value by owners and the prices asked by them when approached regarding the private sale of their lands are very different figures, the discrepancy being much in favor of the latter. The law requires that land be assessed for municipal purposes at value.

Reason for Applications for Division of Suburban Municipalities.

These taxation difficulties have lead to many applications to the local legislature for the division

of suburban municipalities during recent years. Some have been granted and some have not, but in every case the applications came from what might be termed the rural portions, to be separated from the suburban and they were always opposed to the latter.

It may be concluded from the foregoing remarks that the residents of each part of such a municipality feel that division, or a lack of it, is of vital importance to their future well-being. It is, in fact, a case of self-preservation at both ends. But division does not effect a cure, though it may assist the residents in the rural portion of the municipality temporarily. In so far however as lower taxation in the new outer municipality may induce new building and settlement within it, particularly in the portion nearest the city, it is only a matter of time before the same aggravated condition will reassert itself.

Applications to Absorb Parts of Suburban Municipalities.

In some cases the city of Winnipeg has been asked to take over adjoining parts of suburban municipalities. It did so in the case of Elmwood, but generally speaking a disinclination has been shown to increase its area in this way. From the city's point of view acquiring additional territory is unnecessary while it has a large proportion of land vacant within its boundaries unless thereby some particular advantage is to accrue. It should not be overlooked however that suburban residents contribute materially to the welfare of the city, both by their productive services and the spending of their earnings in city stores. They are really city people who live without the city boundary. There is no doubt that inclusion in the city would solve the problem for the portion of the suburban municipality so absorbed, but not for the remaining part. At the time the city absorbed the settled part of East Kildonan (now Elmwood) the remaining part was rural. To-day in the southern portion of that municipality there are over 4,000 inhabitants. Obviously, then, division of a suburban municipality or absorption of parts by the city may afford temporary relief. But they do not constitute a permanent remedy. Possibly the counterpart of a surgical operation will alone effect this. Such operations are usually accompanied by pain and discomfort, but are endured for the ultimate improvement and benefit that will result.

Zoning as a Remedy for the Suburban Problem.

Assuming that suburban municipalities will have to manage their affairs on the same basis as at present, how can "zoning" help to bring order out of disorder?

Arable Zones.

By placing farm and garden lands in an "arable zone", it is reasonable to expect the municipal assessment on such lands would be reduced, because they could not then be used for other than arable purposes. It is doubtful if this would be popular with the owners of such lands, however, on account of the increment clause in the Town Planning Act of Manitoba whereby 50% of the increased value due to the making of a scheme has to be paid to the municipality, which would be payable when, at some later date, any land was taken out of the arable and placed in some other zone. Any reduction in assessment of these lands would result in increased taxation on other parts of the municipality, particularly on the homes and buildings in the urban portion. But the situation there will have to be faced in any event in the not too remote future. It would also be advisable to cancel some of the outlying and unnecessary subdivisions and place them in this zone. Many of the lots in these subdivisions have already reverted to the municipalities, and it might not prove a very difficult matter to accomplish such cancellations.

Residential Zones

The evils resulting from over-subdivision into building lots have been enlarged upon and also the importance of preserving attractive areas for the more costly buildings. That the population and size of built-upon areas are limited by the relative value of buildings and other economic factors has been noted, and also that good building sites should be reasonably accessible and capable of being economically served with sewer, water, and other facilities. All of these things have a bearing on the size and location of residential zones. It might also be advisable in the municipal interest to create such zones with a view to restricting the area of development and securing greater economy thereby.

Commercial and industrial requirements could also with advantage be provided for in view of the conditions peculiar to each case.

The Main Object of Zoning in This Case.

Though a general zoning scheme in each suburban municipality would be a decided advantage, it will be recognized that the main purpose in this case is to keep building lot subdivisions in reasonable locations and within due bounds as to extent, thus releasing arable lands to agriculture and making possible conditions for them to be worked as such.

Regulations for Future Subdivisions.

Though in some quarters the action is likened to

locking the stable door after the horse has been stolen, some of the suburban municipalities are considering, and one has adopted, regulations governing all future subdivisions framed to keep the cost to the community of their development at the minimum possible. These are as follows: In the case of a proposed subdivision into building lots, if the municipality cannot see its way to instal forthwith sewer and water facilities, it will not approve of the subdivision unless the applicant will provide these facilities at his own expense. If he does not wish to do this he may subdivide his land into lots sufficiently large to ensure healthful conditions without the provision of sewer and water facilities, in which event a restriction of one house to a lot would have to be imposed. There are other requirements regarding restrictions, the recognition of town planning schemes in preparation or effect and the provision of areas for recreation and other public purposes. This is a step in the right direction and will tend to keep things straight for the future, but the result of past actions will also have to be dealt with sooner or later.

The Greater Winnipeg Plan.

Local suburban schemes could not be fully effective unless consideration were given to adjacent outside areas in their preparation. There is every reason and need for a Greater Winnipeg Plan embracing the city and suburban municipalities. It has already been remarked that a ring of factories round the city would be most undesirable but if the suburbs are left to drift this situation may easily come to pass. The prevailing winds being north-west the industrial area should be to the east or south east of the city, and such an area would probably be outside of the city limits. Parts of some suburban municipalities are suitable in every respect for industrial purposes. Other suburban municipalities have all the characteristics to make residence therein a pleasure. It should be possible to ensure the best use of these areas. We have recognized the inter-relationship between the suburbs and the city. The advantage of co-operation was recognized when the Greater Winnipeg water district project was launched, which district includes large portions of each of the suburban municipalities. Why not a Greater Winnipeg Plan next? The city and suburban municipalities would all function better if a study were made of the whole territory, and a comprehensive plan prepared as an objective. It might ultimately lead to a Greater Winnipeg council; but, more to the purpose of our discussion, it might form the best solution of the Greater Winnipeg suburban problem.